DEPARTMENT OF THE ARMY
US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MD 21010-5403

PEST MANAGEMENT BULLETIN

The *Pest Management Bulletin*, a quarterly publication of the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Entomological Sciences Program, is devoted to keeping installation pest management and preventive medicine personnel informed and up-to-date in the rapidly changing field of pest management.

IN THIS ISSUE

This Bulletin is designed to keep you informed. Therefore, your comments and suggestions are welcome. If you have a problem, a solution, or a personal observation about any aspect of pest management, please send it to us. Write to the following address: Commander, US Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-TS-OEN (*Pest Management Bulletin*), 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403, or call us at DSN 584-3773 or commercial (410) 436-3773.

http://chppm-www.apgea.army.mil/ento

PEST MANAGEMENT INFORMATION AVAILABLE

Periodically, we like to remind you of some of the services we provide here at the DoD Pesticide Hotline (I know, shameless advertising!). So, here is a brief synopsis of our services:

Pest Management Bulletin

The Pest Management Bulletin is published quarterly (March, June, September, December) and made available via the World Wide Web in both Web format and Adobe Acrobat format. The Bulletin can be found at http://chppm-www.apgea.army.mil/ento/bulletin.htm. For those not having access to the Web, we will still provide you with a hard copy of the Bulletin. If you would desire to receive a hard copy of the Bulletin, please call us on the DoD Pesticide Hotline at DSN 584-3773 or commercial (410) 436-3773. Additionally, you can email us at Kenneth.Olds@apg.amedd.army.mil

Pesticide registration

We can provide you with the current registration status of any federally registered pesticide product, including the sites and pests for which the product is registered. Also, we can provide product registration information for the majority of states (43 of 50 states)

Labels and MSDS

We can provide labels and Material Safety Data Sheets (MSDS) for most of the pesticide products sold in the U.S. If we don't have it available, we will try to get it for you.

Pest Management Information delivered to your e-mail box

We can provide the following types of pest management related information directly to your e-mail box on a daily basis:

Federal Register notices

Notices dealing with pesticide registration/cancellation, endangered species actions, and other pesticide/pest management notices.

Medical entomology information

Information relating to medical entomology from such sources as PROMED and WHO.

General Pest Management News

Various types of pest management related information from such Web sources as Reuters News Service, CNN, and the New York Times.

Canadian medical entomology news

EPA notices

Various types of announcements from EPA including such things as press advisories, Public Relations Notices, meeting announcements, etc.

If you are interested in receiving any or all of this information, please contact us on the DoD Pesticide Hotline at DSN 584-3773 or commercial (410) 436-3773. Or, contact Kenneth.Olds@apg.amedd.army.mil

WWW Page

Our World Wide Web (WWW) page is available at http://chppm-www.apgea.army.mil/ento. There, you may find such things as:

DoD, Army and Other Policy <http://chppm-www.apgea.army.mil/ento/policy.htm>
These are various policies that deal with pest management and pesticides

Meetings of Interest < http://chppm-www.apgea.army.mil/ento/meetings.htm>
Various meetings related to pest management up through the year 2004

Pest Management Fact Sheets <http://chppm-www.apgea.army.mil/ento/facts.htm>
Includes such topics as: Fact Sheets on Venomous and Nuisance Pests, Fact Sheets on Personal Protection and Safety, Fact Sheets on Arthropod-Borne Diseases, Fact Sheets on Rodents and Rodent-Borne Diseases, and Miscellaneous Fact Sheets

USACHPPM Technical Guides <http://chppm-www.apgea.army.mil/ento/guides.htm>
These are Technical Guides developed by USACHPPM on various aspects of pest management. They include such guides as: TG# 103, Prevention and Control of Plague, TG# 138, Commensal Rodent Control, TG# 142, Managing Health Hazards Associated with Bird and Bat Excrement, TG# 196, Poisonous Plants, and TG# 208, Procedures for Thermal Control of Cockroaches in Army Food Service Facilities.

Links to other Military Entomology Sites
There are links to various Military Entomology sites such as: Armed Forces Pest Management Board, Air Force Armstrong Laboratory, and the Air Force Civil Engineer Support Agency.

If you have any questions on this site, please feel free to contact the DoD Pesticide Hotline at DSN 584-3773, commercial (410) 436-3773 or by email to Kenneth.Olds@apg.amedd.army.mil

SOME DIAZINON USES CANCELLED

In the last issue of the *Pest Management Bulletin*, (December, 2000) we wrote about the voluntary cancellation of certain uses of Dursban (chlorpyrifos). Well, now we must report that diazinon is the next ingredient to have many uses cancelled. Registrants and EPA have reached an agreement to cancel all indoor residential and indoor non-residential uses of diazinon. The agreement also phases out and cancels outdoor residential lawn and garden uses over the next few years. The tables below summarize the cancellations.

Home Uses		
Site	**Mitigation Measures**	**Effective Dates**
Indoor Uses All uses inside any structure, vehicle, vessel, aircraft, or enclosed area and/or on any contents therein (except mushroom houses), including residences, food/feed handling establishments, schools, museums, stores, hospitals, sports facilities, warehouses, and greenhouses. All indoor pet uses including pet collars.	Product registrations are being canceled or amended to delete indoor uses from end use product labels (except use in mushroom houses). EPA's Federal Register notice of January 10, 2001, proposed to delete these uses.	Cancellations become effective after the 30-day public comment period, upon issuance of a cancellation order in February 2001. As of March 1, 2001, manufacturing use products may no longer be used to formulate end use products for indoor uses. Retailers stop sale December 31, 2002.

Agricultural Uses Proposed for Cancellation			
Crop		**Action**	**Effective Dates**
Alfalfa	Parsnips	EPA published a Federal Register notice on January 10, 2001, proposing to delete these uses from product labels.	The proposed cancellations may become effective after the 30-day public comment period, upon issuance of a cancellation order in February 2001.
Bananas	Pastures		
Beans (dried)	Peppers		
Bermudagrass	Irish Potatoes		
Celery	Sweet Potatoes		
Red Chicory (radicchio)	Rangeland		
Citrus	Sheep		
Clover	Sorghum		
Coffee	Spinach		
Cotton	Squash (summer and winter)		
Cowpeas	Strawberries		
Cucumbers	Swiss chard		
Dandelions	Tobacco		
Kiwi	Tomatoes		
Lespedeza	Turnips		
Parsley			

This agreement does allow end-users (installations) to use existing stocks of the products for labeled uses until supplies are exhausted.

ALUMINUM PHOSPHIDE

EPA has completed an agreement with registrants of phosphine fumigant products to reduce risks to workers handling the products and to bystanders near application areas. Under the agreement, registrants will develop additional data to better characterize risks to workers and bystanders. This data will be used in future refinements of risk mitigation measures.

In about a year, phosphine users also will be required to develop site-specific fumigation management plans based on guidance that will be part of the product label. This plan must evaluate the suitability of the site for fumigation and include safety measures, emergency procedures, and monitoring and notification provisions, as appropriate. Guidance on how to prepare these plans will be available as part of an Applicator's Manual that will become part of the phosphine product labeling.

Other provisions call for registrants to develop training modules and examination questions that can be used by the States in their applicator Certification and Training programs.

In addition, phosphine product labeling must be amended to reflect the following use requirements:

Prohibit in-transit aeration;
More strictly define "under the supervision of a certified applicator";
Enhance notification of receivers of fumigated rail cars and other containers;
Impose a two-person rule for fumigations requiring entry into a structure; and
Provide safety material to residents having burrows treated.

The Memorandum of Agreement, a fact sheet on the agreement, and the Aluminum and Magnesium Phosphide RED are available on EPA's web site at http://www.epa.gov/REDs.

THOSE NASTY WINTER MOSQUITOES

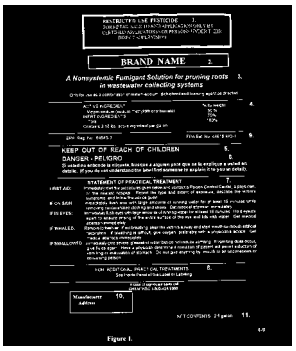
Recently an interesting complaint was made here at Aberdeen Proving Ground (APG). Office personnel were complaining that they were being eaten alive by mosquitoes. One person even commented that the mosquitoes were waiting by the door to attack as they entered the building. A specimen was captured and brought to ESP for identification. The culprit was identified as *Aedes albopictus*, the Asian tiger mosquito. Not only is *Ae. albopictus* a nuisance but it is also a vector of dengue. Perhaps more importantly for us here in Maryland, it is a vector of *Dirofilaria immitis* (dog heartworm), and has recently been shown by USAMRIID to be a competent vector of West Nile Virus. The residents of APG often complain about mosquitoes, but never on 31 January.

Knowing that *Ae. albopictus*, in temperate regions, overwinter in the egg stage, we were sure that our weeklong warm spell was not enough for these critters to be coming in from the outside. But, how else could you get a sudden mosquito outbreak in the middle of winter? We set off to

find the answer to this question. After a quick search of the building, several potted plants were noticed. We inquired about these plants, and learned that they had been brought in from outside at the first frost. The pots that the plants were draining into were inspected and a pupa and larval skins were found.

Mystery solved. We recommended that all drainage pots brought in from the outside be cleaned. Also, when the plants are returned outdoors, the water trapped in these pots should be emptied weekly. Hopefully, this will keep them from augmenting our already budding *Ae. albopictus* population.
(Source: CPT Michael Desena and 1LT Walter Roachell)

PESTICIDE LABELS AND BRAND NAMES


BRAND NAME

A Nonsystemic Fumigant Solution for pruning roots in wastewater collecting systems

KEEP OUT OF REACH OF CHILDREN

DANGER - POISON

STATEMENT OF PRACTICAL TREATMENT

Figure 1.

All of you are aware that the pesticide label is "the law." However, did you know that there might be many different labels for the same pesticide product? I will try to explain why and how this happens.

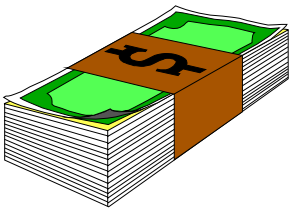
When a pesticide company (registrant) registers a pesticide product with the EPA, they are required to submit what is commonly called a "master label." This label lists all of the sites and pests for which the registrant has done all of the required studies for registration. For example, the product may be registered for sites X, Y and Z and registered for pests A, B and C. Once the registration is approved by EPA, a registration number is assigned to the product. This registration number is a two-part number, with the first part of the number being the company number and the second part of the number being a sequential number for all the products registered by that company. Thus, an EPA Registration Number of 12345-23 indicates the 23rd product registered by company 12345. Company 12345, when submitting the registration package to EPA, must also submit a product name, or brand name, for this product. In this case we will use "Super-G" for product 12345-23.

This is relatively straightforward to this point. However, now company 12345 decides to sell product 12345-23 in states that grow crop "y" to control pest "A." So, company 12345 decides to call the product, "Super-Y." This "Super-Y" product is registered in those states growing crop "Y" and pest "A." Thus, "Super-Y" has a label with only site "Y" and pest "A" on the label – a subset of the master label. At the same time company 12345 decides to market the product under the brand name "Super-X" in those states that have the site "X" with pests "A, B and C." Thus, they register the product in only those states.

Do you get the picture? Obviously, there can be many different brand names for the same product, 12345-23. Then, just to add more confusion, company 12345 can license company 54321 to sell the product as well. At this point, the registration number becomes 12345-23-54321, or what is commonly called a distributor's product registration number. This product too, can have multiple subsets of the original master label. So, you see why brand names can be so confusing.

So, what does all of this mean to you? First of all, you can see how easy it might be to buy a product and not have the use pattern you need on the label – even if you know an EPA Registration Number. Secondly, you can see that product brand names can be very confusing, or nearly meaningless. So, when you are buying or using a pesticide product, remember that "THE LABEL IS THE LAW" and read the label carefully to be sure the site/pest combinations in which your are interested, are on the label.

E-COMMERCE AND PESTICIDE SALES



While not having a major impact on DoD, one of the next big concerns of industry and States is the sale of pesticides via the internet through such venues as E-Bay, other auction sites and direct sales. The primary concern with the e-commerce of pesticides is the sale of restricted-use-pesticides (RUPs). There are two facets regarding these RUP's. The first is that of verification that the purchaser is a certified applicator and the second is that a product being sold via the internet may not be federally restricted but may be restricted in the state where the buyer resides or is going to use the product. There are a number of these products that are state-restricted but not federally-restricted.

Another major concern is that of buying a product that may not be registered in the state in which the buyer may reside or wishes to use the product. As mentioned in the previous article, "Pesticide Labels and Brand Names," a product with a specific EPA Registration Number, may or may not be registered in the state where the buyer resides or may be using the product. Thus, the product may not have the site and pest on the label. Of course, use of a product inconsistent with its labeling is against the law.

One of the other concerns with e-commerce is that of international sales. When looking for a pesticide product via the internet, it is very easy to get connected with a company located in a foreign country – companies from India and China abound on the internet. Many U.S. companies sell products in foreign countries with the same brand names as those used in the U.S. Thus, unless you are very careful with an e-commerce purchase, you could be getting a product that is not even registered in the U.S.

Efforts are underway to help resolve some of these issues. Various companies are looking at ways of verifying certified applicator licenses (from State lists) when purchasing RUP's. Also, efforts are underway to verify state product registrations with the address of the buyer. These checks are not in place yet, but hopefully will be coming soon. In the meantime, "E-Buyer Beware."

65th PURDUE PEST CONTROL CONFERENCE

Mr. Melvin Marks, EFDSouth, NAVFAC, attended the recent Purdue Pest Control Conference and provided us with these notes. Thanks Mel for the input.

ANT PEST MANAGEMENT

Austin M. Frishman
AMF Pest Management Services

Since ants live in colonies, the goal is to get baits to the larvae. If you eliminate a colony, a new one will come in to take its place. Ants invade from the exterior. You can bring ants indoors in potted plants. The feeding needs of ants change. Use multiple bait types. Many species of ants are nocturnal. Ants and plants live in association with each other. Why is this? Because of the presence of aphids. If an ant is traveling and it has something in its mouth it is heading for its nest. Use honey as a monitoring bait. You need to know the ant species as well as the plant with which it is associated. Check www.globexplorer.com that has gps images of properties. More and more environmental management goes hand in hand with pest management. Ants move around in the daytime under mulch. Labeling for ant baits are going to change to specify which bait stations you can use them with. Liquid baits are very attractive to ants but are subject to evaporation. Pharaoh ants have learned to sit on windowsills to feed on dead insects so bait in outdoor areas in window sills. Uncle Al's Bait good for white-footed ants. Outsmart Bait Gel is good. Liquid bait work the quickest. Pharaoh-Rid is still a good product. Check with Zoecon for mixing instructions.

NEW TECHNOLOGIES
EVALUATING PRODUCTS AND EQUIPMENT

Eric Ham
Forshaw Distribution, Inc.

- Inspection Technology – Pro150 Resist-O-Graph; Borescope with or without camcorder; WDI Inspection; (RESIDEX); Insecto Pro (B&G)
- Monitoring – New termite baiting stations from B&G, *****Maxforce, Termitrol; General pests PFT Pitfall, D-Sect trap (ROCKWELL); Aegis (trap monitors)
- Termite Control – chlorpyrifos issue; Premise labels to be expanded for ant control, the introduction of Premise gel bait for localized termite control; Termidor (www.termidoronline.com) also expect label expansion to include ants on the label; BASF now has Phantom (chlorfenapyr); Syngenta has Impasse (thiamethoxam) for termite preconstruction barrier treatment; Firstline now has a Defender Station; Termimesh & Delta Blanket are marketing physical exclusion, Termimesh to be marketed by ABC Pest Control in Austin, TX (512)997-0066 (www.termimesh@earthlink.com); Term-A-Rid 613 is a newly developed termite treated mulch.
- Termite Treatment Equipment – Holdings Mark III in-line injection systems and contained sprayer systems; Hilton drill bits, *****ECO_2 Fume gaseous phosphine fumigant (Fumigation Services & Supply, Inc.)
- New termite treatment strategies of combining barrier treatments with bait monitoring.
- New Bait Products – Outsmart ant bait; CB 441 system of mix and match baits; Eaton's new baiting systems; Cleary Chemical Roach Terminal; Pre-Empt (Bayer) label change to include food handling areas;

- New Residual Products - Whitmire/Microgen introducing Cy-Kick CS (controlled release cyfluthrin) and Microcare CS (controlled release pyrethrin)
- Rodent Control – Rodent Rock Café by Chemicay
- Miscellaneous – Dust Pistol (Gremar, Inc); Drain Management Products (American Bio-Systems); Software Products U-Trap-It.

LITTLE FLIES BIG OPPORTUNITIES

Stephen A. Kells
Abell Pest Control, Inc.

Why are little flies more of a problem? Customer focus, cleaning practices, security and recycling. Three step process in dealing with little fly problems: (1) The appearance of adult flies is a symptom of an underlying breeding problem. (2) The breeding source is always some sort of decaying organic material. Example: food coverts to > decay converts to >soil (mineralization), (3) The species of the adult flies indicates the sources of breeding (identify species). Example pest groups:
(1) Fruit flies – go after food that is relatively fresh. When you cool sugar water the sugar will settle out (i.e. coke residue). Hot water cleaning may solve problem. Watch caulking or foam application because of loose seals. The recycling of cans is also a problem because of the residue that builds up in the bottom of the receptacle. Infestations can be spread between various collection sites. (2) Moth Flies – infest unidentifiable (goo like) foods materials. Often found along a grout line or in cracks in tile floors. Caustic cleaners are often responsible for breaking down these seals. The use of bleach in drains doesn't work.
(3) Phorid Flies – Can identify by their slow response to touch. They don't fly immediately. They go after the nasty stuff (sour mops). Also called coffin flies. Often found in decaying organic mater in soil. These areas often originate at sewer line breaks. The only way to solve the problem is to remove the soil. If the area lies under a slab it becomes a very expensive procedure. Grease trap residues are also a problem. Flying adults often appear in areas far away from the breeding source through wall voids and expansion cracks. (4) Fungus Gnats – Feed on fungus build-up around plants. (5) Large Fruit Flies (sphaerocerids) in the *Drosophila* group.
Control Strategies – Do a thorough inspection (take your time). Cover drain with a trap (plastic baggie). Use sticky traps. Find the foraging site and once it's located, remove it.

YOU DON'T HAVE TO BE AN ENTOMOLOGIST TO IDENTIFY INSECTS

Michael F. Potter
University of Kentucky

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Surveys of applicators show that turn-overs are more from a lack of technical training than low salaries. A failure of applicators to identify the species of pest is a big problem. You not only need to be able to identify pest but also need to be familiar with the pest's life cycle and behavior patterns. For example, many pests are seasonal in nature. You have to know when to go after them to be successful with your treatment. You need a good hand lens (15X), Panasonic light scope (30X) or binocular microscope. Use plastic verses glass collection vials or flat containers. Collect more than one specimen. Collect various life stages and damage. Identification pointers - Ant veins on wings meet in X. Phorid Flies have distinctive wing veins. NPMA Field Guide to Structural Pests one of the best ID references. Good ID reference for spiders the Golden Book on "Spiders and Their Kin" by Herbert Leavy. Web Sites:
www.carleton.edu/curricular/BIOC/resources/ant /index.html "ant ID key".
www.uos.harvard.edu:5050/ehsl/pest "ID Guide to Ants of New England by Gary Alpert..

TERMITE CONTROL – RESEARCH UPDATE

Bradford M. Kard
U. S. Forest Service

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Status of termite ground tests is reported in the January 2001 issue of Pest Control magazine. A vast majority of termite penetration is from around the parameter. Termidor seems to have an impact on controls in the field tests. Normally, after 3 to 5 years in standard termite tests, 90% to a 100% of control plots have been penetrated and wood severely damaged. With Termidor, the treated plots seem to be effecting the entire surrounding population as reflected by the lack of normally anticipated hits on the control plots. Non-Chemical methods – Termimesh where they place stainless steel skirts around utility entrances. Rylan Homes is using this as a standard construction procedure in Florida. They are providing a lifetime warranty with up to a $250,000 warranty against damage. Generally requires the use of low shrinkage low crackage concrete. Some techniques require the scoring of areas that are prone to cracking. USDA has been testing for 6 years and there has been no failure. The secret of success is proper installation. Has been tested in Australia for 12 years with no failures. Vapor barriers – Impasse (Zeneca) Termifilm impregnated with resmethrin. Also evaluated in next issue of *Pest Control* magazine. Green dye is placed in treated film. Also testing Termigranules. No failures after 2 years of ground tests. Also a Kordon TMB treated cloth impregnated in vapor barrier film. One concern is the tendency of plastic to brittle and crack over time.

THE CHANGING FACE OF TERMITE CONTROL

Michael F. Potter
University of Kentucky

We are at a turning point in termite control. There has been a lot of bad press about customer discontent with termite inspections and treatments. Customer surveys show that there is a lot of misunderstanding on the customer's part on what to expect from termite service. For example, 52% of homeowners feel that termite warranties cover free re-treatments and the repair of damage. Very few companies provide damage coverage. Using the Dow termite inspector, researchers found that structures deemed free of infestation still had termites in the wood. Sixty percent of those polled felt that termite treatment should cost less than $500. Homeowners are also concerned about the health risks of pesticides and chemical odors. There is a real challenge for the industry to provide services with which homeowners are happy.

Research has shown that termites can be present in widely spread colonies. Moisture is a driver and an indicator of termite presence. Because of the environmental requirements, termites are generally found in the upper 2-feet of soil. Baiting has gained in popularity but it is very labor intensive, therefore, very expensive. Repellent barrier chemicals have always depended on thorough treatment. However, particularly with post-construction treatments, construction challenges make it very difficult to achieve a thorough treatment. Many times inaccessible spaces in crawl spaces can't be reached. There are also many unpleasantries such as the presence of spiders (brown recluse) and snakes. We don't want to place our applicators in harms way. Even when you think that you have a thorough treatment, procedures such as sub-slab injection treatments may leave gaps that termites can penetrate. Applicators are reporting that call-backs have been dropping when using the new non-repellent (ie Premise, Termidor) termiticides. Why is this? It is felt that, since these products do not repel but actually kill termites, they are more forgiving when it comes to treatment techniques. To test this theory, Kentucky did a test with both Premise and Termidor to see what kind of results they would get if they limited their treatment to the perimeter only. To test the results, monitoring stations were placed both inside and outside the structure at varying distances away from the perimeter treatment. The results were that they got a crash in all termite activity with no activity after 6 days and total control in 3 months with Termidor. No new infestations have yet been found. The results were not as good with Premise. With these new products, we may need to rethink the way we apply treatments and think more in terms of killing zones instead of treating all possible entry points. We may even be able to go back to the $400 treatments.

TERMITE ECOLOGY AND BEHAVIOR IN RELATION TO CONTROL PROCEDURES

Bradford M. Kard
US Forest Service

A study was made concerning the fate of pesticides in the soil environment. The point of the study was to consider the degradation rate of pesticides to determine at what point in time will

termites penetrate a termite treatment barrier? One finding was that termites can penetrate treated soil by lining their tunnels with untreated soil. Termites will make a determination on where to locate based on wood volume. Some termites will aggregate their young on a food resource. It has been shown that they will tend to aggregate at large bait bundles. Refer to the January 2001 article in *Pest Control* magazine.

INSECT ID AND BIOLOGY
OCCASIONAL INVADERS

Eileen Eliason & Kurt Saltzmann
Purdue University

Why do species that are normally outside move indoors? Examples of possible causes include: a change in light sources or a change in season. "Occasional invaders" are considered a pest because of their presence not because of their damage. Millipedes – will curl up in a ball when disturbed, invade home in the fall, live 2-5 years. Pillbugs will roll up in a ball while Sowbugs don't roll up and have spikes on the tip of their abdomen. Brown Recluse - are about the size of a quarter. They can be identified by their three eyespots. They spin a grayish white web. Clover Mites – are a problem in early spring. Are usually seen on the westward (warm) sides of homes. They are the size of a period and when you smash them they leave a red stain. Lady Beetles – invade from the south or west in the fall. Cluster Flies – larger, darker and slower than houseflies. Also, fold their wings at rest. Larvae are parasitic on earthworms. Light traps work well as a control. Box Elder Bugs – pest of box elder, maple, apple trees and others. Are a fall pest. Noted difference between adults and nymphs. Much easier to control in the nymphal stage. Wood Roach – Males will fly and are attracted to light. Female lay their eggs under loose bark. Wing cover only ½ of the abdomen. Fire Brats & Silverfish – Fire Brats are darker in color and prefer hot moist environments. Ground Beetles – predators often attracted to lights. Lights near door entrances are a major issue.

DEEP HARBORAGE TREATMENT
HIT THEM WHERE THEY LIVE

Mark D. Sheperdigian
Rose Exterminator, Co.

Deep harborage is inside walls, under equipment, behind clutter, below a slab, etc. How do you get at it? By removing, dismantling, uncovering. When applying products, inject them, float (dust) them or flow (foam) them. Draw them out with baits or seal them up. View them with a Borescope or with mirror. To monitor for little flies, tape baggy over drains

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STICKY TRAPS AND INSPECTIONS

Bobby Corrigan
RMC Consulting Services
Mike Corbitt
Van Waters and Rogers

Good monitoring programs are the future of the industry. Examples of available pheromone traps: *PANTRY PESTS* (Insects Limited Inc.) http://www.surf-ici.com/insectslimited%2Cinc/insects.htm, Whitmire/Microgen *BEETLE TRAP*. Glue boards (watch for the depth of the glue). The cheaper boards don't have much glue. Zoecon has attractant tablets. Rockwell makes the *TRAP-D-SECT* a very low profile trap. Victor has a trap for small and large roaches with a protective cover. *MAXFORCE ROACH MOTEL* has a pheromone attractant. Monitoring Techniques - You must choose the right monitor for the right location. Must have the correct number and placement. Analyze monitoring results and share the information with the customer. Must have a system for data collection, storage and retrieval. Record! Record! Record! IPM in schools is a model for what the future holds. Trap location - dark, warm and moist areas. Know the range of the pest. Cockroaches (adults) will range in a 10 foot radius. Nymphs will only range an arms length. Try to determine from what direction they're coming. Put monitors in corners. In tropical areas, place monitors in both in-door and out door areas. Snap traps are better monitors for mice. They tend to shy away from glue boards.

ON THE JOB TIPS FOR MONITORING IN COMMERCIAL ACCOUNTS

1. When trap counts are repeatedly zero, but visual complaints continue, conduct a trap shuffle. Move traps into other suspected micro and macro zones conducive to cockroaches.

2. Trap monitors cannot remove a significant portion of a German cockroach population in the field when used in reasonable numbers (i.e., traps do not control cockroaches).
* Even with massive trapping programs, you will only trap a maximum of 30% or less of the population.

3. When attempting to demonstrate before and after results of German cockroach IPM programs, (i.e., "yes, we did our job") use monitors-
* But, you must place the monitors traps in the exact placement before and after the control program.

4. Research has shown repeatedly that traps placed only 0.75 inches away from walls, and vertical surfaces (thigmotactile responses) captured 50% less roaches than those placed flush against walls. So, go for the corners of drawers of drawers, cabinets and walls, and equipment.

5. Always sample at room heights that include low, medium, and high (e.g. include ceilings).

6. Traps are biased for adults (nymphs tend to escape).

7. Only 1st and 2nd instars indicates that a capsule was deposited nearby.
* Several size nymphs indicates closeness to the harborage.

8. How long can cockroaches live on the traps? Adults: 7-10 days , Nymphs: 2-4 days.

9. Zero counts on sticky traps for short periods (24 hours) alone does not confirm that cockroaches are absent. However, traps consistently empty in well placed pest vulnerable areas (PY As) for a prolonged period is a reasonable indicator of no cockroaches, or a very minor infestation level.

10. Leave a few monitors with client for them to be familiar with the traps and how they work.

11. A reasonable number of traps placed out in residence- 24 hr. prior to a professional's visit is a good indicator of population distribution and the relative size (minor, moderate or severe) of the infestation. A 24 hour count will provide you with an estimate of about < 5.0 % of the population.

12 When .traps become damaged, dirty , or full, they should be changed. Traps in good condition will remain effective for several months, and need not be changed. Suggest changing traps after three months, regardless of condition of trap.

NATIONAL PEST MANAGEMENT ASSOCIATION REPORT

Bonnie Everts
NPMA President

Future trends: Arthropod borne diseases will be more of an issue. Anti-pesticide mania will continue. Surveys show that customers want; bugs killed, family protected, do it cheap and don't make it complicated. Encourage all Pest Management Professionals to get involved with the NPMA. They are the primary advocate for the industry.

RESEARCH UPDATE-URBAN PEST MANAGEMENT

Eileen A. Eliason
Center for Urban and Industrial Pest Management
Purdue University

Examples: "Will subterranean termites consume landscape mulches?" Shows Resistance – cypress, redwood, red cedar, pitch southern pine, melaleuca. Shows Susceptibility – slash pine, loblolly pine, red oak, black cherry. Pine straw?

INSECT-BORNE DISEASES AND OTHER PUBLIC HEALTH ISSUES FACING PEST CONTROL PROFESSIONALS

Michael J. Sinsko
Senior Medical Entomologist
Indiana State Department of Health

Hatavirus: First outbreak in May 1993 with 24 cases, 12 fatal. Since 1993, 277 cases have been confirmed. There was an initial 64% fatality rate. Associated with the deer mouse. Virus is very prevalent in the general mouse population. No cases so far in children under 10 years of age. It takes unusual circumstance to contract the disease. It is spread when rodent excreta is present in an aerosol form. The highest concentration of the virus is found in the lung of the mouse carrier. The primary symptom of the disease is a very rapid respiratory failure. Early detection is important. Since 1993, the fatality rate has been reduced to 30%. When working in confined spaces, where rodents are present, use a HEPA-filter in your respirator. Encephalitis: West Nile virus first outbreak in 1999. Transmitted from mosquito to wild bird. Horses may be a reservoir of the virus. The main vector is *Culex pipiens* which breeds in polluted water and catch basins. They like a high level of organic material (soup). There were 62 case reported in 1999. Seven people died. Crows are very susceptible so a primary means of surveillance is to monitor for dead crows. The disease has currently spread to 12 states. Predict that it will eventually spread over the entire US.

OCCASIONAL INVADERS

Stoy Hedges
Terminex International

Many occasional invaders are associated with the general landscape. Don't just routinely do a residual barrier treatment and think that you've solved the problem. The key is to first find the breeding source, then solve the problem. Example: the Odorous house ant often moves indoors in plant mulch. Helpful hints: pull mulch 6 inches away from buildings. Change the landscaping. The pest in question may simply love your landscaping. Mulch should never be more than 2 inches thick. Put copper mesh in weep holes. Make a better choice for your lighting. Example: insects are attracted to mercury vapor lights. Monitor in areas out of your reach. Example: filled storm gutters are prime source of problems.

IPM IN SCHOOLS AND OTHER SENSITIVE ACCOUNTS

Mark Sheperdigian
Rose Exterminator Co.

Perception is the issue. A sensitive account is one where the concern about the pesticide outweighs the concern about the pest. IPM in schools is a big issue. Many states are looking at this.

Remember these points: (1) Inspect first, (2) Use multiple methods of monitoring, (3) Keep good records, (4) Use baits for ants and roaches, (5) No routine use of residual sprays or rodenticides, (6) If residuals are used, don't apply when children are present, (7) Establish a reasonable re-entry period for occupants.

FIVE KEYS TO EFFECTIVE RODENT CONTROL

Ted Bruesch
Liphatech

"Know your stuff" build a good reference library. *"Use the right stuff."* Inspect. Take pictures/ video's. Use UV light and look for phosphorescent patterns. Not everything that glows is rodent urine. Use binoculars to see inaccessible areas. Rats are neophobic (fear of new things in their environment). This is most prevalent in older adults. That is why when you use glue boards you generally only get juveniles. Pre-bait with anything you want them to get use to. Example: use non-toxic bait station then switch to toxic. Mice are always looking for a place to hide. They also test surfaces and will not normally step on a glue board unless the stumble into it. If you are going to use glue boards, place them along a wall where the rodent is more apt to stumble into it. Sometime it works if you leave the paper cover on the glue boards until the critters get use to them. Then remove the covers to capture them. Set multiple traps 1-inch from the wall and parallel to the wall. Rodents have a good sense of taste. Food preference is often passed down from Mom. Protect from contaminating your equipment. Human scent is not a problem but detergents are. If you smoke don't bait. If they get trap shy change the type of trap.

"Use enough stuff." Put out lots of traps, baits, etc.. Keep bait stations full. Remember that there is a social hierarchy. First killed are the alpha males, then the betas and finally the omegas. Don't quit too soon. *"Put stuff in the right place."* A mouse's range is only as far as it needs to be to get safely get back to its nest. Make them feel safe. Place traps and bait stations in hidden areas near damage. Use extension poles to push placements in behind areas. Use PVC pipe as a hidden space in which to place your traps or baits. *"Manage the risky stuff."* Norway rats prefer to eat at home in their burrow. Place bait in burrow. However, remember to keep track of the bait and avoid contamination or exposure to kids and pets. Don't place the bait in the burrow hole and then cover it up with dirt. If you do this, the rat won't even consider the bait and may push it back out while trying to reopen its hole. Place a wadded piece of newspaper in a burrow hole if you want to see if it is still active.

PRO-ACTIVE INSPECTIONS: HOW TO DO THEM

Bobby Corrigan
RMC Consulting Services

Look for pest travel lines. Examples: electric utilities, vegetative borders, plumbing utilities, structural edges, equipment edges, various borders (fence lines, walkways) etc. Read (evaluate) the area. Location! Location! Location! A pest's sense of direction is made easier by lines. Look at cavity and shadow areas. Look at clogged storm gutters. After you close a door from the inside, any light leaks you see around the door are a problem. *The single most common cause of a failed control operation is underestimating the extent of the infestation.* Don't make the mistake of underestimating the size and distribution of a pest population. Don't sacrifice diagnostic observations with a concentrated effort to simply get through your spray or trap run. Don't sell "trap runs". Sell the "full service" package. Identify the pest vulnerable areas (PVAs). Your PVA hit list: use corners for snap traps and bait stations, more than 50% of PVAs we can't get to and the other 50% will take some work to getting to, pull electric switch plates and escutcheon plates around utilities. Be a proactive pest controller!

IT'S IN THE NEWS

TESTIMONY LINKS JAPAN'S BIOLOGICAL WARFARE TO 40's BUBONIC PLAGUE OUTBREAKS IN CHINA
from The Associated Press

TOKYO - Infected fleas that Japan's military dumped on a Chinese city triggered outbreaks of bubonic plague in the early 1940s, a Chinese doctor testified Wednesday. Huang Ketai, a 68-year-old bacteriologist, became the first scientist to offer testimony in court linking Japan's biological warfare to outbreaks of the disease in China. Huang spoke at a trial in which about 180 Chinese plaintiffs are demanding compensation and an apology from the Japanese government for the deaths of their relatives. The plaintiffs believe they were killed in biological experiments, vivisections and other acts of brutality carried out by Japan's notorious Unit 731.
At least 109 people died of bubonic plague in Ningbo, south of Shanghai, in the last two months of 1940 in the outbreaks that exploded days after Japanese war planes dumped fleas over the city center, Huang said.

DOD FINDS TROOPS MISUSED PESTICIDES DURING GULF WAR

WASHINGTON, Jan. 18, 2001 -- DoD investigators have found that troops occasionally misused pesticides during the 1991 Persian Gulf War. Senior defense officials said they can't confirm or rule out a connection between pesticides and illnesses some veterans have been experiencing since the war.

"We're not able to make a link epidemiologically," said Bernard Rostker, undersecretary of defense for personnel and readiness. Rostker also serves as special assistant to the deputy secretary of defense for Gulf War illnesses, medical readiness and military deployments.

DoD released an environmental exposure report Jan. 12 that examined the use and potential long-term health effects of pesticides during the Gulf War. Veterans have reported a wide array of unexplained illnesses that some suspect may be related to their use of and exposure to pesticides during the war. (See http://www.gulflink.osd.mil/pest/)

DoD interviewed 900 Gulf War veterans on their pesticide use during their time in Southwest Asia, and the RAND Corp. surveyed another 2,000 on the same issue.

The RAND survey found that roughly half the troops serving in the area reported using DEET insect repellent nearly every day, RAND senior statistician Ron Fricker said during a Jan. 12 DoD press briefing. Other pesticides were used much less frequently -- only about 6 percent of troops said they used permethrin, the No. 2 pesticide. Press available at http://www.defenselink.mil/news/Jan2001/t01122001_t112usda.html

Fricker said the most widely misused products were pet flea and tick collars. "We found that about 3 percent, or 13,000 people, actually wore a pet flea or tick collar either over their clothes or over their shoes," he said.

Investigators also found evidence of widespread use of pest strips. During the Gulf War, the Environmental Protection Agency recommended using one pest strip for each 1,000 cubic feet of tent space; the EPA today recommends about half a strip for that space, Rostker said.

"And we have examples not only of one pest strip going up in that volume, but if one's good, two must be better, and three should even be better than that," he said. "So it's quite clear that we overused them."

Other survey findings include: 31 percent used more than one pesticide; 9 percent used three or more; and 39 percent used none at all.

RAND also carefully reviewed literature on health effects associated with pesticide exposure and found no evidence of long-term health effects. Findings of the literature review fell into two general categories. There was no evidence of ill effects in literature on four of the studied pesticides: lindane, DEET, permethrin and d-Phenothrin.

"We felt ... we could pretty much rule them out as something that would cause long-term, chronic effects," said RAND Director Ross Anthony at the briefing.

A second set of results deals with substances known as acetylcholinesterase inhibitors, including organophosphates and carbamates, Anthony said. The researchers found instances linking these substances to symptoms similar to those reported by some Gulf War veterans -- fatigue, muscle and joint pain, headaches, cognitive problems and sleep disorders.

"We note that there is a reported biological role of acetylcholinesterase in the symptoms that provide some plausibility for the illness that we see in Gulf War veterans," Anthony said. He warned, however, that results should be used carefully. Some Gulf War veterans were exposed to other acetylcholinesterase inhibitors, in particular nerve agents and pyridostigmine bromide, which troops received to protect them against nerve agents, he said.

"I would also point out that similarities in symptoms alone are insufficient to draw conclusions and that we should look at these (results) with some caution," he said.

SKEETER SPRAY NIGHTMARE

New York Daily News
01/24/2001

At least six men who worked in the city's war on the West Nile virus last summer say the Anvil pesticide they sprayed made them sick and their employer failed to properly protect them.

In sworn affidavits and interviews with the Daily News, the men said they've been plagued by ailments including fatigue, severe headaches, difficulty breathing, loss of hair, nausea and even sexual dysfunction.

All claim their problems started after they began working for Clarke Environmental Mosquito Management, the Illinois-based firm that was paid $4.6 million by the city's Department of Health to conduct massive spraying of Anvil.

In a recent complaint to the federal Occupational Safety and Health Administration, the men said Clarke supervisors gave them little or no training on applying the chemical or information on its dangers.

They say they were sent out alone in spray trucks from their first day on the job, were not given proper safety gear and that company officials later dismissed their complaints of adverse health effects.

Federal and state law requires that pesticides like Anvil be administered only by licensed applicators, or by apprentices who have at least 48 hours of training. And apprentices can only spray under the direct supervision of a licensed applicator.

Jim Mendelson, OSHA area director, confirmed this week that his agency and the state Department of Environmental Conservation are investigating whether Clarke violated regulations.

The company denied that its New York managers acted improperly.

"Clarke has always been committed to stringent safety precautions and training for its employees," spokeswoman Laura McGowan said. "Without exception, our employees received the state-mandated training."

"We had no training whatsoever," said Samuel Gowrie, 46, who for three months was one of Clarke's $11-an-hour nighttime sprayers. "They told us we had nothing to be afraid of, that Anvil wasn't dangerous."

The Environmental Protection Agency says Anvil is one of the safest pesticides on the market, but that no pesticide is completely safe. A 1998 Material Safety Data Sheet for Anvil describes it as "harmful if absorbed through the skin," and warns:

"Applicators and handlers should wear coveralls over all clothing, chemical-resistant gloves ... chemical-resistant footwear plus socks."

But in his first day on the job, Gowrie said, he was given a spray route and sent out alone in one of the company's 50 small pickup trucks without any protective gear. Mounted on the back of each truck was a tank of Anvil and a sprayer.

Half the trucks, including his, had no air conditioning, Gowrie said. That meant windows stayed open as he drove behind a police escort for his first six-hour shift and blanketed the streets and himself with pesticide mist.

The next day, according to Gowrie, he woke up with a bad headache, sneezed constantly and his nose began bleeding.

"My body was jumping, too, and I had chest pains," he said. "When I told them [the supervisors] they should at least have tablets for the headaches, they just laughed."

Kent Smith claims his skin was drenched with insecticide.

As time went on, the symptoms got worse. They included diarrhea, hair loss and sexual dysfunction. Like most of his co-workers, Gowrie said, he had no health insurance and didn't go to see a doctor.

Kent Smith was one of Gowrie's co-workers. A community leader in the South Bronx, he persuaded several neighborhood youths to go with him to apply for jobs at Clarke, which occupied the old Loral electronics factory nearby.

Smith was assigned to one of the company's three all-terrain vehicles and sent to spray Yankee and Shea stadiums and various golf courses and cemeteries. He sometimes worked 16 hours a day, and his skin was constantly drenched with the pesticide, he said.

"They only had two respirators in the whole place and wanted us to share them," he said. "I refused and forced them to get me my own respirator."

"There wasn't even a place to wash up after you finished spraying. Just a fountain where you washed your hands," he said.

While the men were paid $11 an hour, the city paid Clarke $650 an hour per truck.

After a month or so, the men said, they got to see an OSHA film about pesticides.

Company spokeswoman McGowan confirmed that the men were sent out alone, but they were always under the supervision of one of the company's certified applicators, she said, since each man had a Nextel phone to communicate with his supervisor.

According to state DEC spokesman Peter Constantakes, state law says when an apprentice is spraying with pesticides like Anvil, the licensed applicator who supervises him "must be physically present and within voice contact."

"There was no one checking on us," Smith said. "The only time we called a supervisor was when a truck broke down or got into an accident."

In September, one of Smith's co-workers, Corey Gregory, had just such an accident late one night on the FDR Drive.

The fumes from the spraying, he said, "made me nauseous, and I started vomiting in the truck. I lost control of the vehicle and ricocheted from one side to the other of the FDR. All the Anvil spilled out of the truck."

When Gregory told his supervisors what had happened, they reassigned him to the yard.

The six former Clarke workers eventually sought help from environmental lawyer Joel Kupferman of the No Spray Coalition. Kupferman said yesterday he plans to file workers' compensation claims on their behalf.

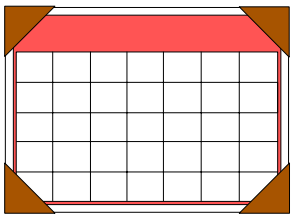
McGowan said the city and state both supervised the company's spraying campaign and found nothing wrong at the time.

'We have not heard any reports of health problems with workers," said city officials.

STUDY SHOWS INSECTICIDES AFFECT MENTAL CAPACITY
February 7, 2001
CBC News
http://cbc.ca/cgi-bin/view?/news/2001/02/07/insecticide010207 OTTAWA - High exposure to chemical insecticides has been shown to affect the mental abilities of potato farmers in the Carchi Province of Ecuador.
LINKS: Websites related to this story Canadian and Latin American researchers collaborated in the study of the region where 8,000 commercial growers account for 40 per cent of Ecuador's potato production.

Many of the farmers operate mixed potato and dairy farms, and are among the country's heaviest pesticide consumers. Using backpacks, they apply pesticides an average of seven times during the growing season, using up to 43 active ingredients. Direct skin contact with pesticides, leaky sprayers, and a lack of protective clothing all contribute to the farmers' health problems. This contact with chemicals was shown to have harmful neurological effects, interfering with the farmers' decision-making abilities and leading to lower productivity, according to Dr. Donald Cole at Ontario's McMaster Institute of Environmental Health. The researchers found a pesticide poisoning rate of 171 per 100,000 population, similar to the highest rates recorded elsewhere in the developing world. This study was part of a larger project jointly funded by the International Development Research Centre, IDRC, the Rockefeller Foundation, and other donors to reduce pesticide use and related health problems among potato farmers in the Carchi Province of Ecuador.

UPCOMING EVENTS



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March, April, May, June, July, August, September, October, November, December

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January, February, March, April, May, June, July, August, September, October, November, December

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MARCH

1 March - 2 March 2001. **Wisconsin Pest Control Association Spring Conference**, Kalahari Resort Center, Wisconsin Dells, WI. Contact: Jerry Batzner, 262-797-4170 ext 110.

5 March - 8 March 2001. **New Jersey Mosquito Control Association annual meeting**, Bally's Park Place Resort, Atlantic city, NJ. Contact: Howard Emerson at skeeters@co.camden.nj.us

6 March 2001. **Rabbit Control**, Churt, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

7 March 2001. **Mole Control**, Churt, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

8 March – 9 March 2001. **Colorado Pest Control Association's Spring Conference**, location to be announced. Contact: Elaine DeWitt, 303-287-4115.

8 March – 9 March 2001. **Stored Product Insects and Mites**, Imperial College, Ascot, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

13 March – 14 March 2001. **Pest Control in Grain Stores**, Newmarket, Suffolk, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

15 March 16 March 2001. **First International Knapweed Symposium of the Twenty-First Century**, Coeur d'Alene, ID. ContactL. Wilson, Univ. of Idaho, Moscow, ID 83844, e-mail LWilson@uidaho.edu, Phone: 208-885-9489 or visit the web at http://www.sidney.ars.usda.gov/knapweed/

18 March – 23 March 2001. **General Pest Control Residential Training**, Warwick University Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

18 March - 30 June 2001. **International Course on Integrated Pest Management**, Wageningen, The Netherlands. Contact: H.A.I. Stoetzer, PO Box 88, 6700 AB Wageningen, The Netherlands, e-mail: iac@iac.agro.nl, Phone: 31-317-495353.

19 March - 21 March 2001. **4th Fumigants and Pheromones Technical Conference**, Thessoloniki, Greece. Contact: Insects Limited, Tel: 1 317 896 9300.

20 March - 21 March 2001. **Sixth International HCH and Pesticides Forum**, Poznan, Poland. Contact: Stanislaw Stobieke, Plant Protection Institute, Sosnicowice, Branch, Gliwicka St. 29, 44-153 Sosnicowice, Poland, Phone (48-32) 238-7584 or visit http://hjem.get2net.dk/HCH-Pesticides/

21 March 2001. **Insect Identification**, Warwick University, Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

21 March - 23 March 2000. **2001 AN INTERNATIONAL WEED ODYSSEY**, An International Invasive Exotic Species Conference, Athens, GA, USA. Contact: C. McCormick, Inst. of Ecol., Univ. of Georgia, Athens, GA 30602, USA. E-mail: cheryl@arches.uga.edu. Fax: 1-706-542-4819. Phone: 1-706-542-2968. Web: www.ecology.uga.edu/.

27 March 2001. **Rodent Control : A Modern Perspective**, Yew Lodge Hotel, Kegworth, Notts, UK. Contact: Pest Ventures, Tel: 01644 822678

28 March 2001. **Blood and Gore: The Battle for Our Bodies**, Yew Lodge Hotel, Kegworth, Notts, UK. Contact: Pest Ventures, Tel: 01644 822678

29 March 2001. **Professional Pest Control Association of NYS Inc**. Annual Spring Workshop, Queens Village, NY. Contact: Ronald Meringolo, 800-283-9056

31 March - 1 April 2001. **Arcadia Insect Fair**, Arboretum of Los Angeles County. Contact: http://www.insectnet.com

APRIL

2 April 2001. **Rabbit Control**, Louth, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

3 April 2001. **COSHH & Risk Assessment**, BPCA, Derby, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

3 April 2001. **Mole Control**, Louth, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

4 April 2001. **Safe Use of Pesticides**, BPCA, Derby, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

5 April - 7 April 2001. **International Conference on the West Nile Virus**, Crowne Plaza Hotel, White Plains, New York. Contact: Science & Technology Meetings Department, New York Academy of Sciences, 2 East 63rd Street, New York, NY 10021, (212) 838-0230, ext. 324 or e-mail conference@nyas.org or vist the website at http://www.nyas.org

6 April 2001. **Working in Confined Spaces**, BPCA, Derby, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

7 April 2001. **Grey Squirrel Control**, Louth, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

20 April - 22 April 2001. **9th Update on Travel and International Medicine**, Seattle, WA. Contact: Phone 206-543-1050 or visit the website at http://www.uwcme.org

MAY

3 May - 6 May 2001. **6th Congress on Infectious Diseases and Tropical Medicine**, Leipzig, Germany. Contact: contact@eucid.org or visit the website at http://www.eucid.org

13 May – 15 May 2001. **Second Annual Symposium on *Coptotermes formosanus***, Radisson Hotel, New Orleans, LA. Contact: Formosan Subterranean Termite Unit, 504-286-4452.

14 May - 18 May 2000. **AQUATIC WEED CONTROL SHORT COURSE 2001**, Fort Lauderdale, FL, USA. Contact: V.V. Vandiver, Jr., IFAS, Univ. of Florida, 3205 College Ave., Fort Lauderdale, FL 33314-7799, USA. E-mail: VVV@ufl.edu. Fax: 1-954-475-4125. Phone: 1-954-577-6316. Website: http://gnv2.ifas.ufl.edu/~conferweb/aw/.

JUNE

1 June - 6 June 2001. **INVASIVE ALIEN SPECIES AND THEIR MANAGEMENT**, as part of the Pacific Science Intercongress, Guam, USA. Contact: R. Muniappan, RMuni@uog9.uog.edu.

5 June – 6 June 2001. **PestEx-ProtEx 2001**, NEC Birmingham, England. Contact: Christine McGee, BPCA, 01332 294288, FAX 01332 295904 or email: enquiry@bpca.org.uk

18 June - 7 July 2000. **51ST ACAROLOGY SUMMER PROGRAM AT OHIO STATE UNIVERSITY**, Columbus, OH, USA. Contact: G..Needham, Acarology Lab BioSci. Room 272, Ohio State Univ., 484 W. 12th Ave., Columbus, OH 43210, USA. E-mail: needham.1@osu.edu. Fax: 1-614-292-7774. Website: www.biosci.ohio-state.edu/~acarolog/sum2k1.htm Phone: 1-614-688-3026.

16 June - 30 June 2001. **Biology of Disease Vectors (Mini-Symposium: Tick and Tick-Borne Diseases)**, University of South Bohemia, Czech Republic. Contact: http://www.sci-site.com/bdv/app.htm or Dr. Libor Grubhoffer, Institute of Parasitology, Branisovska, 31, 370 05 Ceske Budejovice, Czech Republic, Phone +420 38 00 351, mailto:liborex@paru.cas.cz.

JULY

2 July - 5 July 2001. **13th Entomological Congress**, organized by the Entomological Society of Southern Africa and the University of Natal, Pietermaritzburgh, KwaZulu-Natal. Contact: Professor Denis J. Brothers, e-mail: brothers@nu.ac.za or call (+27) (0) 33-260 5106.

15 July - 18 July 2001. **AQUATIC PLANT MANAGEMENT SOCIETY ANNUAL MEETING**, Minneapolis, MN, USA. Contact: R. Gunkel, <Gunkelr@wes.army.mil>. Website: www.apms.org.

AUGUST

2 August – 5 August 2001. **The Practice of Biological Control: Importation and Management of Natural Enemies and Agents**, Montana State University, Bozeman, MT. Contact: Tim King, Tim Kring, tkring@uark.edu or the website at http://opal.msu.montana.edu/conf_services/biocontrol/index.htm

13 August - 24 August 2001. **Seventh International Dengue Course**, Havana, Cuba. Contact: Prof. Maria G. Guzman, Instituto "Pedro Kouri", Autopista Novia del Mediodia, Km 6 P.O. Box 601, Mnao. 13, Ciudad Habana, Cuba, Tel: 53-7-220450.

14 August - 17 August 2001. **4TH ASIA PACIFIC CONFERENCE ON ENTOMOLOGY**, Kuala Lumpur, MALAYSIA. Contact: I.A. Ghani, School of Env. & Nat. Res. Sci., Fac. of Sci./Tech., Univ. Kebangsaan Malaysia, 43600 Bangi, Selangor D.E., MALAYSIA. E-mail: IdrisGh@ukm.my. Web: www.mapps.org.my/mapps/APCE.html.

25 August - 29 August 2001. **SOCIETY OF NEMATOLOGISTS ANNUAL MEETING**, Salt Lake City, UT, USA. Contact: A.P. Nyczepir, USDA-ARS, 21 Dunbar Rd., Byron, GA 31008, USA. E-mail: anyczepir@byronresearch.net. Fax: 1-912-956-2929. Phone: 1-912-956-6438.

25 August - 29 August 2001. **AMERICAN PHYTOPATHOLOGICAL SOCIETY ANNUAL MEETING**, Salt Lake City, UT, USA. Contact: APS, 3340 Pilot Knob Road, St. Paul, MN 55121-2097, USA. E-mail: <aps@scisoc.org>. Fax: 1-612-454-0766. Website: www.scisoc.org

SEPTEMBER

9 September - 14 September 2001. **3RD EUROPEAN VERTEBRATE PEST MANAGEMENT CONFERENCE**, Kibbutz Ma'ale Hachamisha, ISRAEL. Contact: Ortra Ltd., PO Box 9352, Tel Aviv 61092, ISRAEL. E-mail: <vert@ortra.co.il>. Fax: 972-3-683-4455. Phone: 972-3-683-4444. Website: ortra.com/vertebrate/.

10 September - 12 September 2001. **British Society for Parasitology 12th Malaria Meeting**, University of Leeds, U.K. Contact: Judith Smith (j.e.smith@leeds.ac.uk) or visit the website at: http://www.parasitology.org.uk or www.abdn.ac.uk/bsp

10 September - 12 September 2001. **ROYAL ENTOMOLOGICAL SOC. ANNUAL MEETING**, Aberdeen, Scotland, UK. Contact: A.J. Mordue, A.J.Mordue@abdn.ac.uk

11 September - 14 September 2001. **Environmental Health Congress Exhibition**, Bournemouth International Centre. Contact: CIEH, Tel: 020 & 7928 6006.

12 September - 15 September 2001. **6th INTERNATIONAL CONFERENCE ON THE ECOLOGY AND MANAGEMENT OF ALIEN PLANT INVASIONS (EMAPi) 2001**, Leicestershire, UK. Contact: L.E. Child, Centre for Environmental Studies, Loughborough Univ., Loughborough, Leicestershire LE11 3TU, UK. E-mail: <L.E.Child@lboro.ac.uk>. Phone: 44-(0)1-509-222558.

16 September – 21 September 2001. **General Pest Control Residential Training**, Warwick University Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

16 September - 21 September 2001. **Third International Congress of Vector Ecology**, Barcelona Spain. Contact: rct@rct-congresos.com or phone (34) 93 415 69 38.

17 September - 21 September 2001. **FIRST INTERNATIONAL SYMPOSIUM ON BIOLOGICAL CONTROL OF ARTHROPODS**, Honolulu, HI, USA. Purpose: to bring together biological control practitioners from around the world to promote and address international issues relating to arthropod biological control. Contact: R. Van Driesche, Dept. Entomology, Univ. of Massachusetts, Amherst, MA 01003, USA. Phone: 1-413-545-1061. E-mail: <vandries@fnr.umass.edu>. Website: ww.isbca.ucr.edu.

19 September 2001. **Insect Identification**, Warwick University, Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

OCTOBER

2 October - 3 October 2001. **2001 - A Pest Odyssey**, London, UK. Contact: English Heritage & Science Museum, Tel: 020 7233 4200.

21 October - 24 October 2001. **JOINT ANNUAL MEETING, ENTOMOLOGICAL SOCIETIES OF CANADA and ONTARIO**, Niagara Falls, ON, CANADA. Contact: C.S. Dupree, Dept. of Environ. Biol., Univ. of Guelph, Guild, ON N1G 2W1, CANADA. E-mail: CSDupree@evbhort.uoguelph.ca. Phone: 1-519-824-4120.

NOVEMBER

6 November - 9 November 2001. **INTERNATIONAL CONFERENCE, ENVIRONMENTAL RISK ASSESSMENT OF PESTICIDES AND INTEGRATED PESTICIDE MANAGEMENT IN DEVELOPING COUNTRIES**, Kathmandu, NEPAL. Contact: A. Herrmann, K-IPM Conf., Inst. of Geog. and Geoecol., Tech. Univ. Braunschweig, Langer Kamp 19c, D-38106 Braunschweig, GERMANY. E-mail: ipmktm@tu-bs.de. Fax: 49-531-391-8170 Web: www.tu-bs.de/institute/igg/physhyd/conference.html.

12 November - 15 November 2001. **BRIGHTON CROP PROTECTION CONFERENCE 2001**, Brighton, UK. Contact: The Event Organization, 8 Cotswold Mews, Battersea Square, London SWll 3RA, UK. E-mail: <eventorg@event-org.com>. Fax: 44-171-924-1790. Website: <www.BCPC.org>.

13 November -14 November 2001. **PESTICIDE BEHAVIOR IN SOILS AND WATER**, Brighton, UK. Research symposium in conjunction with BCPC 2001 (above).

21 November 2001. **PestTech 2001**. National Motorcycle Museum, Birmingham, UK. Contact: NPTA, Tel: 0115 952 4333.

DECEMBER

3 December-9 December 2001. **2ND AFRICAN ACAROLOGY SYMPOSIUM**, Nairobi, KENYA. Theme: "Novel Approaches to Tick and Mite Management in the New Millennium." Contact: M. Knapp, ICIPE, PO Box 30772, Nairobi, KENYA. E-mail: <MKnapp@icipe.org>. Fax: 254-2-860110.

9 December – 13 December 2001. **Entomological Society of America (ESA) Meeting**, Town and Country Resort Hotel and Convention Center, San Diego, CA. Contact: ESA, (301) 731-4535 or visit the website at http://www.entsoc.org

9 December – 14 December 2001. **General Pest Control Residential Training**, Warwick University Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

12 December 2001. **Insect Identification**, Warwick University, Coventry, England. Contact: British Pest Control Training, 1 Ground Floor, Gleneagles House, Vernon Gate, Derby, DE1 1UP, 01332 294288 or email enquiry@bpca.org.uk

* * * * 2002 * * * *

FEBRUARY

10 February - 13 February 2002. **WEED SCIENCE SOCIETY OF AMERICA ANNUAL MEETING**, Reno, NV, USA. Contact: WSSA, J. Lancaster, PO Box 1897, Lawrence, KS 66044, USA. E-mail: <jlancaster@allenpress.com>. Fax: 1-913-843-1274. Phone: 1-913-843-1235.

17 February – 20 February 2002. **American Mosquito Control Association's Annual Meeting**, Adam's Mark Hotel, Denver, CO. Contact: AMCA, 318-474-2723.

MARCH

24 March - 26 March 2002. **INTERNATIONAL IPM CONFERENCE**, Toronto, CANADA. Contact: M.E. Appleby, OMAFRA, 95 Dundas St., R.R.#3 Brighton, ONT K0K 1H0, CANADA. E-mail: <margaret.appleby@omafra.gov.on.ca>. Fax: 1-613-475-3835. Phone: 1-613-475-5850.

JULY

22 July - 26 July 2002. **5th International Conference of Hymenopterists**, Friendship Hotel, Beijing, China. Contact: sea@panda.ioz.ac.cn or visit the website at http://www.ioz.ac.cn/zcd/

SEPTEMBER

8 September -13 September 2002. **11TH INTERNATIONAL CONGRESS OF ACAROLOGY**, Merida, MEXICO. Contact: J.B. Morales-Malacara, XI ICA Secretary, Lab. de Acarologia, Dept. de Biologia, Fac. de Ciencias, Univ. Nacional Autonoma de Mexico, Coyoacan 04510 DF, MEXICO. E-mail: <JBMM@hp.fciencias.unam.mx>. Fax: 52-5-622-4828. Phone: 52-5-622-4923.

12 September - 13 September 2002. **ROYAL ENTOMOLOGICAL SOC. ANNUAL MEETING**, Cardiff, UK. Contact: H. Jones, Jonesth@cardiff.ac.uk

NOVEMBER

17 - November - 21 November 2002. **ENTOMOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING**, Fort Luderdale, FL. Contact: ESA, 9301 Annapolis Rd., Lanham, MD 20706-3115, USA. Fax: 1-301-731-4538. Phone: 1-301-731-4535. E-mail: <esa@entsoc.org>. Website: <www.entsoc.org>.

DECEMBER

* * * * 2003 * * * *

OCTOBER

26 October - 30 October 2003. **ENTOMOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING**, Cincinnati, OH, USA. Contact: ESA, 9301 Annapolis Rd., Lanham, MD 20706-3115, USA. E-mail: <esa@entsoc.org>. Fax: 1-301-731-4538. Website: <www.entsoc.org>. Phone: 1-301-731-4535.

NOVEMBER

November * **BRIGHTON CROP PROTECTION CONFERENCE 2003**, Brighton, UK. Contact: The Event Organization, 8 Cotswold Mews, Battersea Square, London SWll 3RA, UK. E-mail: <eventorg@event-org.com>. Fax: 44-171-924-1790. Website: <www.BCPC.org>.

No date **ANNUAL MEETING, SOCIETY OF NEMATOLOGISTS**, Ithaca, NY, USA. Contact: W. Brodie, USDA-ARS, Dept. of Plant Path., 334 Plant Science, Cornell Univ., Ithaca, NY 14853, USA. E-mail: <BBB2@cornell.edu>. Fax: 1-607-255-4471. Phone: 1-607-272-3745.

* * * * 2004 * * * *

JULY

24 July - 28 July 2004. **AMERICAN PHYTOPATHOLOGICAL SOCIETY ANNUAL MEETING**, Spokane, WA, USA. Contact: APS, 3340 Pilot Knob Road, St. Paul, MN 55121-2097, USA. E-mail: <aps@scisoc.org>. Fax: 1-612-454-0766. Website: <www.scisoc.org>.

NOVEMBER

7 November - 11 November 2004. **ENTOMOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING** Salt Lake City, UT, USA. Contact: ESA, 9301 Annapolis Rd., Lanham, MD 20706-3115, USA. Fax: 1-301-731-4538. E-mail: <esa@entsoc.org>. Website: <www.entsoc.org>.

COURSES FOR DOD CERTIFICATION

Appendix A lists the DoD certification and re-certification classes being offered. If you are interested in any of these courses, please contact the referenced POCs.

Visit: http://www.afpmb.org/pubs/courses/courses.htm

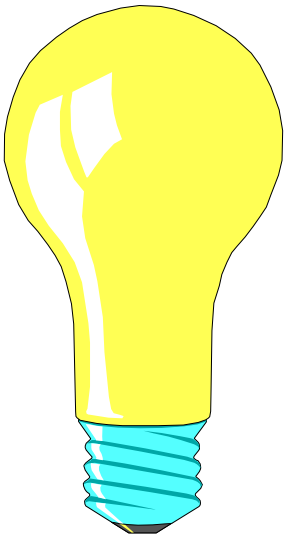
DOD STOCK LISTED PESTICIDES

The updated list of DoD Stock listed pesticides can be found in Appendix B. Please note that changes are listed in bold. The most current list can always be found on the AFPMB web page at: http://www.afpmb.org/pubs/misc/pest012001.htm

DOD EQUIPMENT LIST

Appendix C lists the DoD Pest Management Material Other Than Pesticides. The most current list can always be found on the AFPMB website at: http://www.afpmb.org/pubs/misc/dod012001.htm

ON THE LIGHTER SIDE



Veterinarian's Office sign:

"All unattended children will be given a free kitten"

Plumber's Shop:

"We repair what your husband fixed."

Pizza Shop slogan:

"7 days without pizza makes one weak."

At a tire shop in Milwaukee:

"Invite us to your next blowout."

Door of a Plastic Surgeon's Office:

"Let us help pick your nose."

Sign at the Psychic's Hotline:
"Don't call us, we'll call you."

At a Towing Company:
"We don't charge an arm and a leg. We want tows."

Billboard on the side of the road:
"Keep your eyes on the road and stop reading these signs."

On an Electrician's Business:
"Let us remove your shorts."

In a Veterinarian's Office:
"Be back in 5 minutes, Sit! Stay!"

In a Nonsmoking Area:
"If we see smoking we will assume you are on fire and take appropriate action."

On Maternity Room Door:
"Push, Push, Push."

At an Optometrist's Office:
"If you don't see what your looking for you've come to the right place."

On a Taxidermist's window:
"We really know our stuff."

In a Podiatrist's Office:
"Time wounds all heels."

On a fence:
"Salesmen Welcome: Dog food is expensive."

Outside a Muffler Shop:
"No appointment necessary, we'll hear you coming." and " No muff is too tuff"

Inside a Bowling Alley:
"Please be quiet, we need to hear a pin drop."

In the front yard of a Funeral Home:
"Drive carefully, we'll wait."

In a Counselor's Office:
"Growing old is mandatory, growing wise is optional.

Lot outside Veterinarian's Office:

"Parking for Customers Only, all others will be Neutered.

APPENDIX A
COURSES FOR DOD CERTIFICATION

Please see the AFPMB site for the most current listing of DoD Certification Courses:
http://www.afpmb.org/pubs/courses/courses.htm

Updated January 29, 2001

DoD Pest Management Courses

If you see any information that needs to be corrected or updated, please contact Capt Mauer, who can be reached at Tel: (301) 295-7479, DSN Prefix 295 or E-mail: <mauerdj@acq.osd.mil>.

ARMY SPONSORED COURSES

1. For information on the following courses, contact SSG Kerry McKinley, Academy of Health Sciences, U.S. Army, ATTN: MCCS-HPM, Fort Sam Houston, TX 78234?6100, Tel: (210) 221?6801/6733, DSN Prefix 471, E-mail: <kerry.mckinley@amedd.army.mil>. Classes are conducted at Fort Sam Houston, TX.

Pest Management Certification Course (6H-F12/322-F12):
MAR 26 - APR 13, 2001
JUN 4 - JUN 22, 2001
AUG 13 - AUG 31, 2001

Recertification (6H-F13/322-F13)
FEB 26 - MAR 2, 2001
JUL 23, - 27, 2001
SEP 10 - 14, 2001

2. For information on courses in Germany, contact CPT(P) Dwight Rickard, USACHPPM-EUR, CMR 402, APO AE 09180, Tel: 49-6371-86-8540/44, DSN: 486-8544. Classes are conducted at the USACHPPM-EUR, Landstuhl, Germany.

3. For information on courses taught at the Environmental Training Center, contact Ms. Gail Boeff, ATTN: ATZR-BT, Fort Sill, OK 73503-5100, Tel: (580) 442?2111, Fax: (580) 442?5722, DSN Prefix 639. The Environmental Training Center at Fort Sill, OK, conducts a variety of environmental, natural resources and occupational health courses.

NAVY SPONSORED COURSES

1. For information on the following courses, contact HM2 Whalen, NDVECC, Naval Air Station

Jacksonville, Box 43, Jacksonville, Florida 32212, Tel: (904) 542?2424 ext 3029, Fax: (904) 542?4324, DSN Prefix 942. Unless noted otherwise, classes are conducted at the Disease Vector Ecology and Control Center, NAS Jacksonville, Jacksonville, FL.

Pesticide Applicator Training (Core) (B?322?1070), Instruction for Initial Certification:
MAR 5 - 12, 2001
SEP 10 - 17, 2001
MAR 4 - 11, 2002

Plant Pest and Vegetation Management (B?322?1071), Initial Certification for Categories 2, 3, 5 & 6:
MAR 13 - 16, 2001
SEP 18 - 21, 2001
MAR 12 - 15, 2002

Arthropod and Vertebrate Pest Management (B?322?1072), Initial Certification for Categories 7 & 8:
MAR 19 - 28, 2001
SEP 24 - OCT 3, 2001
MAR 18 - 27, 2002

Recertification (B-322-1074)
FEB 21 - 22, 2001
APR 10 - 11, 2001
NOV 6 - 7, 2001
APR 9 - 10, 2002

Operational Entomology Training (B?322?1077), designed for A/D & Reserve PMTs, EHOs, Entomologists, Epidemiologists & others assigned
to PM units:
MAY 7 - 18, 2001
OCT 15 - 26, 2001
FEB 4 - 15, 2002
MAY 6 - 17, 2002

Medical Entomology and Pest Management Technology (Reserve Training) (B-322-1050):
FEB 5 - 16, 2001
JUN 4 - 15, 2001
JUL 16 - 27, 2001
FEB 4 - 15, 2002
May 6 - 17, 2002

2. For information on the following courses, contact HM1(SW) Compton, NDVECC, 19950 Seventh Ave., NE, Suite 201, Poulsbo, WA 98370-7405, Tel: (360) 315-4450, Fax: 4455, DSN Prefix 322, E-mail: <postmaster@ndvecc.navy.mil>. Unless otherwise noted, classes are conducted at the Navy Disease Vector Ecology and Control Center, Bangor, WA.

Pesticide Applicator Training (Core) (B?322?1070), Instruction for Initial Certification:
SEP 10 - 17, 2001

Plant Pest and Vegetation Management (B?322?1071), Initial Certification for Categories 2, 3, 5 & 6:
SEP 18 - 21, 2001

Arthropod and Vertebrate Pest Management (B?322?1072), Initial Certification for Categories 7 & 8:
SEP 24 - OCT 3, 2001

Recertification Course (B?322?1074), Category 8:
FEB 6 - 9, 2001
JUL 17 - 20, 2001
DEC 11 - 14, 2001

Operational Entomology Training (B-322-1077), Recertification in DoD Category 8 is available as part of the course. Note: Reservists who have attended CIN: B-322-1050 and whose certification has not expired may attend this course.
JUN 18 - 29, 2001*
*Camp Pendleton

Shipboard Pest Management (B?322?1075): NDVECC(B)
MAR 7, 2001
JUN 6, 2001*
JUN 13, 2001
JUL 11, 2001
SEP 5, 2001
OCT 24, 2001*
OCT 31, 2001
* Ingleside, TX

AIR FORCE SPONSORED COURSES

1. For information on the following courses, contact Ms. Haris Georges, 366 TRS/TRRT, 727 Missile Road, Sheppard AFB, TX 76311-2254, DSN: 736-3538, Fax: 736-3345. Classes are conducted at Sheppard AFB, TX. Quotas are obtained through the Unit or MAJCOM Training Managers.

Pest Management Certification - J3AZR3E453-003 is a four-week training course that meets the basic requirement for initial certification training under DoD 4150.7-M, Plan for Certification of Pesticide Applicators of Restricted Use Pesticides. Achievement of the minimum passing scores satisfies the formal training and testing requirement for initial certification in the core phase of pest control and pest control Category 3, Ornamental and Turf; Category 5, Aquatic; Category 6,

Right-of-Way; Category 7, Industrial, Institutional, Structural, and Health-Related; and Category 8, Public Health. This course DOES NOT satisfy the OJT and correspondence course requirements for certification. All DoD personnel who have held DoD certification in one or more pest control categories but cannot meet the requirements for triennial recertification, according to DoD 4150.7-M, are eligible to attend. Personnel who possess current certification are NOT eligible to attend this course.
APR 9 - MAY 4, 2001
AUG 20 - SEP 17 2001

Pest Management Recertification - J3ARR3E453-002 is a one week course that meets the basic requirements for recertification training under DoD 4150.7-M, Plan for Certification of Pesticide Applicators of Restricted Use Pesticides. Achievement of the minimum passing scores satisfies the formal training requirements for recertification in the core phase of pest control and pest control Category 3, Ornamental and Turf; Category 5, Aquatic; Category 6, Right-of-Way; Category 7, Industrial, Institutional, Structural, and Health-Related; and Category 8, Public Health. Students are allowed to return to duty after testing in only the core phase and in the categories in which they hold initial certification. Only DoD personnel who require triennial recertification to apply restricted use pesticides are eligible to attend. Personnel should be within one year of expiration of their DD Form 1826.
FEB 12 - 16, 2001
APR 16 - 20, 2001
JUN 18 - 22, 2001
JUL 30 - AUG 3, 2001
SEP 17 - 21, 2001

2. For information on the following course, contact Capt Armando Rosales, USAF School of Aerospace Medicine, Brooks AFB, TX 78235-5123, Tel: (210) 536-3734, DSN Prefix 240, e-mail: <armando.rosales@brooks.af.mil>. Information is also available on the WWW at: <http://wwwsam.brooks.af.mil/web/eh/html/bugs.htm>.

Operational Entomology Course (OEC) - #B30ZY43M3-000 is a two-week training course that builds individual capabilities to perform surveillance and control for disease vectors that significantly impact military missions during war or operations other than war. Emphasis is placed on preventing vector-borne disease morbidity and mortality. Instruction includes vector biology, vector-borne disease, surveillance techniques, risk assessment, and control strategies. The OEC provides academic instruction, practical exercises, and field experience. Additional details can be obtained from the USAFSAM/PH Web page at:
<http://wwwsam.brooks.af.mil/web/eh/entomology/usafento.htm>.

The OEC is evaluated for 64 CME credits for officers and four CCAF credits in biology for enlisted personnel. Prerequisites: Students must fully qualify for worldwide deployment and have no medical condition limiting full participation in the field portion of the course. The course is open to active duty, ANG, and AFRC personnel with AFSCs of 4E0X1, 4S0X1 (SEI 496), 3E4X3, 43H3, 43M3, 48A3, and 48P3, or their DoD equivalents, and other personnel with consent of the faculty. Priority is given to active duty personnel assigned to mobility positions or from installations with a high risk of vector-borne disease. Enlisted personnel must be E-4 or

higher. Officers must be fully qualified in their AFSC and have a minimum of one year of service. ECL 80 SA.

Special Requirements: The uniform for military students is BDUs, coveralls for civilians. Individuals allergic to bee stings or other venomous arthropods should bring an anaphylaxis emergency kit. The training office or student must provide the Course Supervisor, DSN 240-3734, with a telephone contact for the student.
MAR 19 - 30, 2001
JUN 4 - 15, 2001
SEP 10 - 21, 2001

3. For information on the following courses, contact Ms. June Brewer, 910 AW, YARS, Vienna, OH 44473?0910, Tel: (330) 609?1111/1178, Fax: (330) 609-1616, DSN Prefix 346. Information is also available on the WWW at: <http://www.afrc.af.mil/units/910aw/aerial-spray(PUBLIC)/AERIALSPRAY/index.htm>.

Aerial Application of Pesticides (Certification) - #AAP-01 is a one-week course that addresses the tenets and methodologies for aerial application of pesticides, with an emphasis on operational aspects and military applications. The primary scope of the course includes general principles, legal aspects, contracts, map types and preparation, spray system calibrations, aerial spray math, DoD spray systems, meteorological effects, occupational health and safety, operations and mission support, disease control, pilot's view, private applicator's view, environmental aspects, computer modeling, swath and droplet characterization, pesticide monitoring, public relations, contingency wartime usage, spill prevention and containment, and other pertinent operational issues involving the use of aerial spray. The course features guest lecturers from the U.S. Army, U.S. Navy, U.S. Department of Agriculture, private applicator firms, and other government agencies. It is offered once each June.
JUN 4 - 8, 2001

APPENDIX B

DOD STOCK LISTED PESTICIDES

Please see the AFPMB site for the most current listing of DoD Stock Listed Pesticides:
http://www.afpmb.org/pubs/misc/pest012001.htm

LIST OF STANDARD PESTICIDES AVAILABLE TO DOD COMPONENTS AND ALL FEDERAL AGENCIES (JANUARY 1, 2001)

NSN 6840-	Item (Alternative Trade Name)	Unit Package	AAC*	Price	Unit Issue	Users
00-063-3981	Algaecide, Copper Sulfate, 80.16% pentahydrate, crystal (Cuprose)	50-lb bag	L	----------	BG	A,F
00-282-0971	Fungicide, Wood Preservative, copper naphthenate mixture (COP-R-NAP)	5-gal co	D	**185.16**	CO	A,N,F,M
01-209-6298	Fungicide, Wood Preservative, copper naphthenate mixture (COP-R-NAP RTU)	5-gal co	L	---------	CO	A,N
01-360-4741	Fungicide, Methylisothiocyanate (MITC-FUME) ***RESTRICTED USE PESTICIDE***	18 tubes	L	---------	CO	A,N,F,M
01-457-6588	Fungicide, Methyl Azoxystrobin, 50% (Heritage)	(6) 1- lb. cont.	J	2100.00	BX	A,N,F,M
00-392-7593	Herbicide, Bromacil, 21.9% lithium salt of bromacil, liquid (Hyvar X-L)	(2) 2.5-gal co	D	**326.84**	BX	A,N,F,M
00-181-7106	Herbicide, Bromacil, 40.8%, water soluble liquid (Bromax-4L)	5-gal drum	D	**713.14**	DR	A,N,F
01-408-9079	Herbicide, Bromacil, 40.8%, wettable powder (Hyvar X)	(12) 4-lb bags	H	**1086.59**	BX	A,N,F,M
00-684-8975	Herbicide, Chlorate-Borate mixture, 30% sodium chlorate, 68% sodium metaborate tetraahydrate, granular (Monobor Chlorate)	50-lb bag	Z	**61.83**	BG	A,N,F
01-005-7523	Herbicide, Diquat, 35.3%, water soluble liquid (Reward)	1-gal co	D	**120.95**	GL	F
00-815-2799	Herbicide, Diquat, 35.3%, water soluble liquid (Reward)	(2) 2.5-gal co	D	**604.31**	BX	A,N,F
01-341-9346	Herbicide, Diuron, minimum 80% diuron, granular	25-lb bag	D	**124.82**	BG	A,N,F
00-001-7710	Herbicide, Diuron-Bromacil mixture, 40% bromacil, 40% diuron, granular (Krovar I DF)	6-lb bag	D	**73.39**	BG	A,N,F
01-108-9578	Herbicide, Isopropylamine salt of glyphosate, 41%, water soluble liquid (Roundup Pro)	(2) 2.5-gal co	D	**268.75**	BX	A,N,F
01-388-0142	Herbicide, Isopropylamine salt of glyphosate, 41%, water soluble liquid (Roundup Pro)	30-gal drum	D	**1521.53**	DR	A,N,F
01-356-8893	Herbicide, Isopropylamine salt of glyphosate, 41%, water soluble liquid (Rodeo)	(2) 2.5-gal co	D	**592.54**	BX	A,N,F,M
01-377-7113	Herbicide, Isopropylamine salt of glyphosate, 0.96%, water soluble liquid (Roundup Ready-to-Use)	24-oz pump spray bottle	D	**5.53**	BT	F
01-399-0673	Herbicide, Isopropylamine salt of glyphosate, 0.96%, water soluble liquid (Roundup Dry Pack)	25 pkg.	D	**80.57**	BX	A,N,F,M
01-356-8902	Herbicide, Isopropylamine salt of imazapyr, 27.6% (Arsenal)	(2) 2.5-gal co	D	**1570.16**	BX	A,N,F,M
01-318-7417	Herbicide, Oryzalin, 40% (Sulflan A.S.)	1-gal bot	L	---------	GL	A,N,F,M
00-145-0013	Herbicide, Prometone, 25% prometone, emulsifiable concentrate (Pramitol 25E)	5-gal can	D	**99.34**	CN	A,F
01-319-2890	Herbicide, Tebuthiuron (Spike 80W)	4-lb bag	L	---------	BG	A,N,F,M
01-457-6576	Herbicide, Tebuthiuron-Diuron, 1% Tebuthiuron, 3% Diuron (Spraykil SK-13)	40 lb. container	D	**93.47**	CO	A,N,F,M
00-577-4194	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), oil miscible/water emusifiable liquid (low volatile ester form)	(2) 2.5-gal co	H	**113.72**	BX	A,N,F,M
00-664-7060	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), water soluble liquid (amine salt form)	(2) 2.5-gal co	H	**103.57**	BX	A,N,F,M
01-377-7110	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), 0.4%, water soluble liquid (amine salt form) (Weed-B-Gon)	24-oz pump spray bottle	D	**6.50**	BT	F
00-753-4963	Insect Repellent, clothing application, 75% DEET, 25% ethanol	2-oz bottle	V	**1.45**	BT	A,N,F,M
01-278-1336	Insect Repellent, clothing application, aerosol (Permethrin Arthropod Repellent)	(12) 6-oz cans	D	**40.21**	BX	A,N,F,M
01-284-3982	Insect Repellent, personal application, (3M/EPA 58007-1)	(12) 2-oz tubes	D	**35.94**	BX	A,N,F,M
01-334-2666	Insect Repellent, clothing application, 40% permethrin, liquid (2-Gal sprayer)	(12) 151-ml bot	D	**170.73**	BX	A,N,F,M
01-137-8456	Insect Repellent, personal application, 3% benzocaine, 10% precipitated sulfur (Chigg-Away)	188-ml bot	D	**2.85**	BT	A,N,F,M
01-288-2188	Insect Repellent, personal application & sunscreen, 20% DEET/SPF15 (Sunset)	(12) 2-oz tubes	D	**48.40**	BX	A,N,F
01-452-9582	Insect Repellent, personal application & sunscreen, 20% DEET/SPF15 (Sunset)	320 packets	D	**357.36**	BX	A,N
01-345-0237	Insect Repellent, clothing application, permethrin (IDA)	12 kits	D	**42.64**	BX	A,N,F,M
00-142-8965	Insect Repellent, personal application, 30% DEET (Cutter Insect Repellent Stick)	(12) 1-oz sticks	D	**31.19**	BX	A,N,F
00-145-0016	Insecticide, Aluminum phosphide, 55 % tablets (Phostoxin/Fumitoxin) ***RESTRICTED USE PESTICIDE***	100 tablets	D	**21.27**	CN	A,N,F
00-442-5698	Insecticide, Aluminum phosphide, 55 % tablets (Phostoxin/Fumitoxin) ***RESTRICTED USE PESTICIDE***	1660 pellets	D	**28.45**	BT	A,N,F
01-377-7049	Insecticide, *Bacillus thuringiensis*, 10% (Bactimos Briquets)	100 Briquets	D	**75.21**	BX	A,N,F,M

00-180-6069	Insecticide, Baygon, 1% propoxur, liquid (Roach and Ant Spray)	1-gal can	V	**11.23**	GL	A,N,F,M
01-287-3938	Insecticide, Boric Acid, aerosol (Perma-Dust)	(12) 9 oz cans	D	**59.00**	BX	A,N,F
00-932-7297	Insecticide, Carbaryl, 80%, water dispersible powder (Sevin 80S)	(5) 10-lb bags	H	**275.28**	BX	A,N,F
01-104-0887	Insecticide, Carbaryl, 42.6%, liquid (Carbaryl 4L)	(2) 2.5-gal co	D	**168.20**	BX	F
01-033-4481	Insecticide, Carbaryl, 5%, dust (Sevin 5% dust)	(12) 4-lb bags	D	**160.91**	BX	A,N,F
01-313-7359	Insecticide, Cyfluthrin (Tempo 2EC/Tempo SC Ultra)	(12) 240-ml bot	D	**517.78**	BX	A,N,F,M
01-383-6251	Insecticide, Cyfluthrin (Tempo 20WP)	(288) 9.5-g pack	D	**411.40**	BX	A,N,F,M
01-390-4822	Insecticide, Cypermethrin (Demon WP)	1-lb jar	D	**65.60**	LB	A,N,F,M
01-431-3345	Insecticide, Deltamethrin (Delta Dust)	1-lb co	D	**11.48**	LB	A,N,F,M
00-753-5038	Insecticide, Diazinon, 2%, dust	20-lb co	D	**34.58**	CO	A,N,F,M
00-782-3925	Insecticide, Diazinon, 47.5%, emulsifiable concentrate	1-gal can	D	**42.00**	GL	A,N,F,M
00-142-9438	Insecticide, Dichlorvos, 20% (plastic strips)	48 strips	D	**198.86**	BX	A,N,F,M
01-412-4634	Insecticide, D-Phenothrin, 2%, aerosol	12-oz can	D	**5.75**	CN	A,N,F,M
01-067-2137	Insecticide, D-trans Allethrin and Resmethrin, 0.15% and 0.2% minimum, respectively, aerosol **(Kill Zone House & Garden Insect Killer Formula 3)**	12-oz can	D	**1.90**	CN	A,N,F,M
01-122-2651	Insecticide, Dursban, 42% chlorpyrifos, emulsifiable concentrate (Dursban 4E)	1-gal can	D	**114.16**	GL	N,F,M
01-338-6003	Insecticide, Dursban, 20% chlorpyrifos, microencapsulated (Empire 20)	1-pint co	D	**26.02**	PT	A,N,F,M
01-270-9766	Insecticide, Dursban, 42.8% chlorpyrifos, emulsifiable concentrate (Dursban TC/CYREN PRO Termite Conc.)	(4) 1-gal co	D	**204.39**	BX	A,N,F,M
00-402-5411	Insecticide, Dursban, 42% chlorpyrifos, emulsifiable concentrate (Dursban 4E)	5-gal can	D	**509.63**	CN	A,N,F,M
01-203-6161	Insecticide, Dursban, 19.36% chlorpyrifos, liquid (Mosquitomist 1.5 ULV)	5-gal can	D	**293.02**	CN	A,N,F,M
01-338-2487	Insecticide, Dursban, 0.5% chlorpyrifos, aerosol (Engage)	(12) 20-oz cans	D	**77.72**	BX	A,N,F,M
01-412-4361	Insecticide, Dursban, 20% chlorpyrifos, emulsifiable concentrate (Dursban Pro)	1-pint co	Z	**12.35**	PT	A,N,F,M
01-087-6672	Insecticide, Ficam, 76% bendiocarb, wettable powder (Ficam)	1-lb jar	D	**83.35**	LB	A,N,F,M
01-183-7244	Insecticide, Fly Bait, 1% methomyl (Apache/Golden Malrin)	5-lb can	D	**19.50**	CN	A,N,F,M
01-287-3913	Insecticide, Hydramethylnon (Amdro Fire Ant Bait)	(24) 6-oz bot	L	---------	BX	A,N,F,M
01-398-6799	Insecticide, Hydramethylnon (Siege Gel Bait)	4-30 gm reser-voirs	D	**31.36**	BX	A,N,F,M
01-424-2494	Insecticide, Fenoxycarb {Logic (Award Brand of Logic)}	25-lb bag	J	**256.24**	BG	A,N,F,M
01-224-1269	Insecticide, Fipronil, cockroach, large size (Combat Quick Kill)	8 bait stations/ box/ 12 boxes	D	**88.67**	PG	A,N,F,M
01-180-0167	Insecticide, Fipronil, cockroach, regular size (Combat Quick Kill)	12 bait stations/ box/ 12 boxes	D	**73.71**	PG	A,N,F,M
01-471-5650	Insecticide, Fipronil (Maxforce Roach Killer Bait Gel)	4-30 gram reser-voirs/box	D	**24.46**	BX	A,N,F,M
01-298-1122	Insecticide, Fipronil (MaxForce Ant Bait)	96 stations	D	**58.02**	PG	A,N,F,M
01-318-7416	Insecticide, Hydroprene, emulsifiable concentrate (Gentrol IGR)	(10) 1-oz bot	D	**53.75**	BX	A,N,F,M
01-457-6580	Insecticide, Imidacloprid, 5% granular (Merit 0.5 g)	30 lb. bag	J	50.00	BG	A,N,F,M
01-428-6646	Insecticide, Lambda-cyhalothrin, 9.7% (Demand CS)	(8) 8 oz bottle	D	**295.60**	BX	A,N,F,M
01-431-3357	Insecticide, Lamda-cyhalothrin (Demand Pesttab)	40 tablets	D	**71.42**	CO	A,N,F,M
00-655-9222	Insecticide, Malathion, 57.0%, emulsifiable concentrate, class 1	1-gal co	D	**42.07**	GL	A,N,F,M
00-685-5438	Insecticide, Malathion, 57.0%, emulsifiable concentrate, class 1	5-gal can	D	**135.27**	CN	A,N,F,M
00-926-1481	Insecticide, Malathion, 95%, liquid, grade B	54-gal drum	D	**1842.68**	DR	A,N,F,M
01-169-1842	Insecticide, Malathion, 95%, liquid, grade B	5-gal can	D	**203.24**	CN	A,N,F,M
01-424-2495	Insecticide, Methoprene (Altosid XR Briquets)	220 Briquets	D	**714.50**	BX	A,N,F,M
01-424-2493	Insecticide, Methoprene (Altosid SR-20 Liquid Larvicide)	(2) 2.5-gal co	J	**5162.78**	BX	A,N,F,M
01-426-5472	Insecticide, N-ethyl perfluorooctane sulfonamide (Advance Dual Choice)	36 stations	D	**29.16**	PG	A,N,F,M
01-270-9765	Insecticide, Naled, 85%, liquid (Dibrom)	30-gal drum	J	**3556.99**	DR	A,N,F
00-597-6111	Insecticide, Naphthalene, ball form	1-lb box	D	**5.09**	LB	A,N,F,M
01-467-0994	Insecticide, Nithiazine, Fly Strips (Quikstrike), 2 strips per package	(12) Pkg./box	D	**197.06**	BX	A,N,F
00-174-1825	Insecticide, P-Dichlorobenzene, crystal/flake	100-lb drum	J	**441.68**	DR	A,N,F
00-174-1824	Insecticide, P-Dichlorobenzene, crystal **GSA**	1-lb can	J	**3.83**	LB	A,N,F,M
01-318-7415	Insecticide, Propetamphos, 50% (Catalyst)	(8) 3.2-oz bot	D	**34.15**	BX	A,N,F,M
01-104-0780	Insecticide, Pyrethrins, 3% pyrethrins with synergists, liquid (ULV fog concentrate)	1-gal bot	D	**97.17**	GL	A,N,F,M
00-459-2443	Insecticide, Pyrethrins, or d-phenothrin, aerosol (Wasp Freeze/Wasp Stop-per II Plus)	(12) 12-oz cans	D	**52.86**	BX	A,N,F,M
00-823-7849	Insecticide, Pyrethrin, aerosol (PT 565 Plus XLO)	(12) 12-oz cans	D	**118.02**	BX	A,N,F
01-359-8533	Insecticide, Resmethrin (Scourge)	5-gal can	D	**390.92**	CN	A,N,F
01-457-6583	Insecticide, Spinosad, 11.6% (Conserve SC)	1 gal cont.	J	**313.39**	GL	A,N,F,M
01-474-7751	Insecticide, Sumthrin-Piperonyl Butoxide ,10%-10%, (Anvil 10+10 ULV)	(2) 2.5-gal/box	D	**800.00**	BX	A,M,F,N
01-474-7706	Insecticide, Sumthrin-Piperonyl Butoxide, 10%-10%, (Anvil 10+10 ULV)	250 gal co	D	**37087.50**	CO	A,N,F,M
01-424-3132	Insecticide, Temephos (Abate 4E)	2.5-gal co	J	**755.62**	CO	A,N,F,M
01-467-1029	Mosquito Larvicide and Pupicide (Agnique MMF)	(2) 2.5-gal co	Z	**167.00**	BX	A,N,F
01-431-3352	Rodent Indicator Bait Blocks (Census Bait Blocks)	285 blocks	D	**56.90**	CO	A,N,F,M
00-089-4664	Rodenticidal Bait, Anticoagulant, 0.005% diphacinone	40 blocks	D	**52.69**	BX	A,N,F,M

00-753-4973	Rodenticidal Bait, Anticoagulant, 0.005-0.0055% diphacinone, pellets	5-lb can	V	**9.36**	CN	A,N,F
01-151-4884	Rodenticidal Bait, Anticoagulant, 0.005% broadiolone (Maki), pellets	11-lb can	D	**30.25**	CN	A,N,F,M
01-426-4808	Rodenticidal Bait, Anticoagulant, 0.005% brodifacoum (Talon-G), pellets	10-lb can	D	**40.44**	CN	A,N,F,M
01-435-9320	Rodenticidal Bait, 2% zinc phosphide (ZP Rodent Bait) *****RESTRICTED USE PESTICIDE*****	(250) 7.5-g pkg.	J	**40.06**	CO	N
00-753-4972	Rodenticide, Anticoagulant, concentrate 0.106% sodium salt of diphacinone (LIQUA-TOXII**)**	50 pouches	D	**265.28**	BX	A,N,F,M
01-435-9318	Rodenticide, 10% zinc phosphide (ZP Tracking Powder) *****RESTRICTED USE PESTICIDE*****	(4) 500-g bot	J	**35.09**	BX	N

+User Code A=Army, N=Navy, F=Air Force, M=Marines SOS (DSCR-Richmond)=S9G

DLA/DSCR POC:

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***ACQUISITION ADVICE CODES (ACC)**

D. DOD INTEGRATED MATERIAL MANAGER (IMM) STOCKED, AND ISSUED. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by the Integrated Material Manager/Military Service supply policy.
   1. The item is centrally managed, stocked, and issued.
   2. Requisitions will be submitted in accordance with Military Service requisitioning procedures.

G. GENERAL SERVICES ADMINISTRATION (GSA) INTEGRATED MATERIAL MANAGED, STOCKED AND ISSUED. Identifies GSA managed items available from GSA Supply Distribution Facilities. Requisitions and fund citations will be submitted in accordance with GSA/Military Service requisitioning procedures.

H. CENTRAL CONTRACT - NOT STOCKED ITEM. Direct delivery under central contract #(non-stocked items) issue, transfer, or shipment is not subject to specialized controls other than those imposed by IMM/Service/Agency supply policy.
   1. The item is centrally managed and procured.
   2. Normal issue is by direct shipment from the vendor to the user at the order of the ICP or IMM. However, orders for quantities less than the vendor's minimum order of quantity may be issued from stock by ICP or IMM supply distribution facilities.
   3. Requisitions and fund citations will be submitted in accordance with IMM/Service/Agency requisitioning procedures.
   4. Generally, delivery will be made within applicable Service/Agency guidelines addressing customer-required time frame.

I. DIRECT ORDERING FROM A CENTRAL CONTRACT/SCHEDULE. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by Integrated Material Manager/Military Service supply policy. The item is covered by a centrally issued contractual document, or by a multiple award Federal Supply schedule for GSA managed items, which permits using activities to place orders on vendors for direct delivery to the user.

J. NOT STOCKED, CONTROLLED PROCURED. Identifies IMM/Military Service centrally managed but not stocked items. Long lead times must be anticipated, since procurement will be initiated only after receipt of a requisition. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

K. CENTRALLY STOCKED FOR OVERSEAS ONLY. Main means of supply is local purchase. Item is stocked in domestic supply system for those overseas activities unable to procure locally due to non-availability of procurement sources or where local purchase is prohibited. Requisitions will be submitted by overseas activities in accordance with Service/Agency requisitioning procedures. NOTE: CONUS activities will obtain supply support through local procurement procedures.

L. LOCAL PURCHASE. IMM/Military Service managed items authorized for local purchase, as a normal means of support, by the Military Service, or base, post, camp, or station level. Items not stocked in wholesale distribution system of IMM/Military Service ICP. The local purchase forms authorized by the individual IMM/Military Service must be used. NOTE: GSA FSS items are included.

V. TERMINAL ITEM. Identifies items in stock; but future procurement is not authorized. Requisitions may continue to be submitted until stocks are exhausted. Preferred items National Stock Number (NSN) normally provided by the application of the phrase, "When Exhausted Use (NSN)". Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures as applicable.

X. SEMIACTIVE ITEM-NO REPLACEMENT. A potentially inactive NSN which must be retained in the supply system as an item of supply because (1) stocks of the item are on hand or in use below the wholesale level and (2) the NSN is cited in equipment authorization documents TO&E, TA, TM, etc. or in-use assets are being reported.
   1. Items are authorized for central procurement but not authorized for stockage at wholesale level.
   2. Requisitions for in-use replacement will be authorized in accordance with individual Military Service directives.
   3. Requisitions may be submitted as requirements generate. Repetitive demands may dictate at ACC change to permit Wholesale stockage.

Y. Y. TERMINAL ITEM. Further identifies AAC V items on which wholesale stocks have been exhausted. Future procurement not authorized.
   1. Requisitions will not be processed to the wholesale suppliers.
   2. Internal Services' requisitioning may be continued in accordance with Military Service requisitioning policies.

Z. INSURANCE/NUMERIC STOCKAGE OBJECTIVE ITEM. Items, which may be required occasionally or intermittently and prudence requires that a nominal quantity of material be stocked due to the essentiality or the lead-time of the item.
   1. The item is centrally managed, stocked and issued.
   2. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

APPENDIX C
DOD EQUIPMENT LIST

DoD PEST MANAGEMENT MATERIEL, OTHER THAN PESTICIDES, LISTING

Please see the AFPMB site for the most current listing of the DoD Equipment List: http://www.afpmb.org/pubs/misc/dod102000.htm

As of JANUARY 1, 2001

A. Disclaimer.

1. The Pest Management Materiel List, Other Than Pesticides, paragraph C., below, does not constitute procurement authority for materiel listed herein. Use of trade names in this list is solely for the purpose of providing specified information to aid in the identification of specific products and does not imply endorsement of the products named or criticism of products not mentioned. Products mentioned in this list do not constitute a guarantee or warranty of these products by the Armed Forces Pest Management Board (AFPMB), the Military Departments, or the DoD.

2. Most of the pesticide dispersal equipment listed in paragraph C., below, should only be used by personnel (i.e. preventive medicine or installation pest control personnel) who have been formally trained and certified in accordance with DoD 4150.7-P, "The DoD Plan for the Certification of Pesticide Applicators, September 30, 1996 or DoD 4150.7-M, DoD Pest Management Training and Certification, April 24, 1997. All other personnel should not procure or use pesticide dispersal equipment unless specifically authorized by Service instructions, regulations, or directives.

3. This list is maintained, and periodically reviewed by the Armed Forces Pest Management Board's Pest Management Equipment Committee. Users are encouraged to submit notice of errors and additional information to the: Armed Forces Pest Management Board, Forest Glen Section, WRAMC, Washington, DC 20307-5001 and to Defense Supply Center Richmond (DSCR), ATTN: JDTA, 8000 Jefferson Davis Hwy, Richmond, VA 23297-5809.

B. Purpose.

The purpose of the Pest Management Materiel List, Other Than Pesticides, is to provide a descriptive reference of DoD standard available pest management equipment and materiel, other than pesticides.

C. Pest Management Materiel, Other Than Pesticides Lists.

1. Hand Sprayer, Pesticide, Manually Operated, Compressed Air. A manually carried piece of equipment that can discharge liquid pesticides by means of a hand-compressed pump in one, two, or three gallon capacities.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Unit Price	U/I	Users+
00-191-3677	Sprayer, Pesticide, Manually Carried, 1 gallon stainless tank, with pressure gauge. Formerly MIL-S-14102, replaced by CID A-A-55748. Flow rate - 0.8 l/min. Current inventory on hand does not include a spare parts package. Future purchases will include three sets of spare parts including; crack and crevice tip assemblies, nozzle gaskets and O rings, plunger cups, check valves, and strainer/filters.	58536	D	**137.71**	EA	A,N,F,M
00-641-4719	Sprayer, Pesticide, Manually Carried, 2-gallon stainless tank with pressure gauge. Formerly MIL-S-14102 replaced by CID A-A-55748. Flow rate - 0.8 l/min, includes three sets of spare parts including crack and crevice tip assemblies, nozzle gaskets and O rings, plunger cups, check valves, and strainer/filters.	58536	D	**154.02**	EA	A,N,F,M
00-720-0465	Sprayer, Pesticide, Manually Carried, Model Sureshot A-2600, 2 pt capacity, steel tank, no accessories included. **GSA**	92997	H	**41.82**	EA	N,F
01-338-5390	Sprayer, Pesticide, Manually Carried, Whitmire System VII Single Pack, Part Number 21-0700, includes pouch for three pesticide product aerosols and a 10 foot memory coiled hose. Pesticide aerosols must be ordered separately.	67184	D	**96.62**	EA	A,N,F,M
01-332-8746	Gauge, Sprayer, Pesticide. Part Number 803-311, For retrofitting pressure gage on one and two-gallon compressed air sprayers listed above.	29670	D	**8.05**	EA	A,N,F,M
4330-01-332-1639	Fluid Filter, Gauge, Pesticide Sprayer. Part Number 146-605. For retrofitting pressure gauge NSN (listed above) to one and two gallon compressed air sprayers listed above. **S9C**	29670	D	**2.52**	EA	A,N,F,M

2. Duster, Pesticide, Manually Carried. Pest Control Equipment which disperses pesticide dust formulations via manually operated bellows, sifters or fans.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-132-5935	Duster, Manually Carried, 5-10 lb. tank capacity. FEDSPEC RR-D-780C. Manually operated rotary fan type; accessories include one straight discharge nozzle, two non-flexible straight extension tubes (14" long) and one curved non-flexible tube (10" long). Flow rate - 10-50 lbs./hr, and wt 8 lbs. Used to treat rodent burrows for ectoparasite control.	81348	Z	**144.54**	EA	A,N,F,M
00-132-5936	Duster, Manually Carried, Tubular Pump, 1lb tank capacity. CID A-A-55555. Designed to apply dusts for spot treatment indoors and outdoors. Flow rate - 10-50 lb./hr, and wt 2.03 lbs. May be used to apply pesticides and rodenticides in rodent burrows.	58536	D	**32.65**	EA	A,N,F,M
01-441-5250	Centro Bulb Duster, bulb duster, Part Number 27920 and 28140 and 28120, consists of one 14oz bulb duster, with a straight metal nozzle, a 2 inch curved tip nozzle and a 12 inch extension with coupling.	9L921	J	**38.19**	KT	A,N,F,M

3. Sprayer and Duster, Pesticide, Manually Carried, Backpack. Designed to discharge either liquid or solid pesticides, under pressure, dispersed by means of a blower. Liquid particle discharge size is 50 to 100 microns. Tank/hopper size is variable.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-463-0147	Sprayer-Duster, Pesticide, Backpack, STIHL Model SR400, gasoline engine driven, includes, granular spreader, ULV nozzle, and field parts kit. Tank size – 3.5 gal., 24.6" high X 18.9" wide X 11" deep, 24 lbs empty wt.	9Z575	Z	**750.37**	EA	A,N,F,M
01-157-4000	Sprayer-Duster, Pesticide, Backpack, Solo Model 423, gasoline engine driven, 5 horsepower, 1.6 quart fuel tank, includes dusting attachment and set of dosage pieces, three gallon pesticide tank. Discharges mist 33 ft horizontally, and 25 ft vertically. 27" high X 18" wide X 12" deep weighs 25 lbs. empty. Note: Echo Model DM9, formerly listed under this NSN is no longer available for procurement.	8T480	V	**605.09**	EA	A,N,F,M

4. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide, pushcart Mounted. A portable or push cart mounted. Unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-019-4557	Sprayer, Pesticide, Pushcart Mounted, electric motor driven, 120V AC, Model Space III or CID A-A-52286 primarily used to control stored product pests. Mist, fine spray output – 0.5 to 3.5 oz per min, 5-gallon pesticide tank, operating pressure 4 PSIG, wt 176 lbs., shipping wt. 310 lbs.	58536	Z	**5088.10**	EA	A,N,F,M

5. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide. A skid or frame mounted unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-772-0090	Sprayer, Pesticide, Frame Mounted, mist and solid stream, gasoline engine driven, MIL-S-12511, 42" lg. X 26" wi X 30" hi, wt 174 lbs., 50 ft hose (0.375 inch internal diameter, and oil resistant), 5 horsepower engine, piston driven pump, 3GPM discharge rate, pressure gage, spray gun, discharge control valve, and two discharge hoses included. Pesticide tank not included. **A12/FLZ**	82254	W	**5593.76**	EA	A,F
00-916-6462	Sprayer, Pesticide, Frame Mounted, mist and solid stream, gasoline engine driven, Part No, 47500, Mil-S-12511, 42" lg. X 26" wi X 30" hi, wt 174 lbs., 50 ft hose (0.375 inch internal diameter, and oil resistant), 1.5 horsepower engine, piston driven pump, 3GPM discharge rate, pressure gage, spray gun, discharge control valve, and two discharge hoses included. Pesticide tank not included. **A12/FLZ**	82254 81349	C	**5593.76**	EA	A,F
00-993-4000	Sprayer, Pesticide, Frame Mounted, mist and solid stream, Part No CSR47500A, Mil-S-12511, 42" lg. X 26" wi X 30" hi, wt 174 lbs., 50 ft hose, (0.375 inch internal diameter, and non-oil resistant), 4.0 horsepower engine, piston driven pump, pressure gage, spray gun, discharge control valve, and one discharge hoses included. 3 GPM discharge rate. Pesticide tank not included. **A12**	82254 81349	C	**5593.76**	EA	A
01-053-0127	Sprayer, Pesticide, Skid Mounted. FMC Model DM10E200SRK, Part No. 5268191. Modular constructed sprayer with a 200-gallon tank.	50492	J	**7990.66**	EA	A
01-211-7226	Sprayer, Pesticide, Frame, Mounted, gasoline engine driven, MIL-S-12511, 51" X 15" X 19", wt 100 lbs. Flow rate – 3GPM at 300 PSI operating pressure. Pesticide tank not included. **A12**	81349	C	**995.00**	EA	A
01-454-1981	Pesticide Sprayer, Electric, Liquid (SPEL), AG 25 Sprayer, battery/electric, solid stream sprayer, 25 gal plastic tank, 15 ft hose,	03JL1	J	**440.63**	EA	A,N,F,M

	.0375 in inside diameter hose, wt. 25.6 lbs., L 29 ½" x W 20"x Ht16."					
01-026-9162	Sprayer, Pesticide, Skid Mounted, gasoline engine driven, SMITHCO Part No 7830-MH, 200 gallon, fiber glass tank, wt 825 lbs. Flow rate - 10 GPM at 425 PSI, 5.75 horsepower, mist and solid stream, piston pump, 100 foot, 0.05 inch inside diameter, abrasion and weather resistant hose.	61684	Z	**3882.87**	EA	A,F

6. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide, Trailer Mounted. A trailer mounted unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	**Item (Alternate Trade Name)**	**Cage Code**	**AAC***	**Price**	**U/I**	**Users+**
01-474-7367	Spray System, WeedSeeker, Complete DB210 WeedSeeker system including 55 GL chemical tank, 14 GL fresh water tank and a 12V pump, installed on a folding and breakaway boom all mounted on a 6 x 4 John Deere Gator with a heavy duty alternator. System includes 10 sensors, 10 valve cartridges, 1 CP controller, associated electrical cables and plumbing.	1JRR1	J	**27173.21**	EA	A,F,N,M
01-474-7318	Spray System, WeedSeeker Kit, SB102 kit that includes 2 WeedSeeker sensors, 2 valve cartridges, a CP controller and associated electrical cables and plumbing.	1JRR1	D	**3100.00**	EA	A,N,F,M
01-474-7285	WeedSeeker add-on kit (A001)includes 1 WeedSeeker sensor, 1 valve cartridge, an electrical cable and associated plumbing	1JRR1	D	**990.00**	EA	A,N,F,M
00-166-2910	Sprayer, Roto Mist, Fine Spray, 4 Wheel Trailer Mounted, FMC Model 303T, blower diameter 40 inches, air volume 60000 CFM, air volume 95 MPH, blower rpm 2200, pump capacity 20 GPM, pump pressure 0-400 lbs., 300 gallon tank. **A12/FLZ**	06350	L	**8430.00**	EA	A,F
00-901-0720	Sprayer and Duster, Pesticide, Trailer Mounted, gasoline engine driven, **BUFFALO Turbine Agricultural Equipment Model BT-CSM10G,** 10 gallons or 100 lb. tank capacity, 10 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist sprayer, 10000 CFM discharge rate at 150 MPH.	**93146**	J	**17410.99**	EA	A,N,F
00-925-9594	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, MIL-S-82068, size B, 500 gallon tank, flow rate - 25 GPM at 700 PSI, 168" X 75" X 80", wt 1800 lbs., 18 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist and solid stream, piston pump, includes 2 spray guns, 200 feet of 0.50 inch diameter, abrasion and weather resistant hose.	81349	J	**18913.59**	EA	A,N,F
00-925-9598	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, MIL-S-82068C, size C, 200 gal steel tank, 5.75 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist and solid stream, 1 discharge nozzle, piston pump, flow rate – 10 GPM discharge rate at 425 PSI, 100 foot 0.50 inch inside diameter, abrasion and weather resistant hose.	81349	J	**9798.50**	EA	A,N,F
01-413-9095	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, FIMCO P/N TTS250, 200 gallon polyethylene tank, flow rate - 16 to18 GPM at 30 to50 PSI, 5 horsepower, 8 roller pump, 2 wheel, pneumatic tire trailer, 100 ft hose, high pressure, 3/8" inside diameter hose & Model 43H, trigger, aluminum handgun.	1B437	J	**3351.55**	EA	A,N,F

7. Sprayer, Pesticide, Fog/Aerosol Generator (ULV/ULD), Manually Carried. A manually carried unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-818-6648	Fog Generator, Manually Carried, gasoline engine driven, thermal fog, Curtis Dyna Model 2610 Golden Eagle. Provides indoor/outdoor thermal fog for mosquito and fly control, 52" X 9.5" X 25.5", wt 19 lbs., 1 gallon pesticide tank. Flow rate - 5 GPH at 6 psi, adjustable shoulder strap included.	82254	Z	**1070.21**	EA	A
01-206-9636	Sprayer, Manually Carried, DC (rechargeable battery), Ulva Fan, Dram Model MK2, Ultra Low Volume. Flow rate - 60 ml/min at 3 PSIG, 0.5-liter plastic pesticide reservoir, and wt 3.25 lbs. with out battery.	3W681	D	**420.19**	EA	A,N,F,M
01-456-2625	Fogger, Hand Held, gasoline engine driven, ULV, London Fog Eliminator, PN# 8100, 25" long X 20 ½" high X 10 ½" wide, 24 lbs. empty wt. Normal dry fog rate is 5-6 gph.	56215	J	**1045.00**	EA	A,N,F,M
01-456-2622	Fogger, Hand Held, gasoline engine driven, ULV, London Aire Colt. PN# 8675, 14" long X 11" wide X 12" high, 19 lbs. empty wt. Flow rate – 0-4 oz per minute.	56215	J	**1495.00**	EA	A,N,F,M
01-456-2623	Fogger, Hand Held, gasoline engine driven, ULV, Clarke P-1, PN# L7800-001, 17 lbs. empty wt.	65183	J	**1400.00**	EA	A,N,F,M

8. Sprayer, Pesticide, Fog/Aerosol Generator (ULV/ULD), Pushcart Mounted. A push cart mounted unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-019-4557	Sprayer, Pesticide, Pushcart Mounted, CID A-A-5286, Micro-Gen Model SpaceIII, electric powered, 120 volt, 60 Hz, 3 phase motor, 1 horsepower, 4 wheel hand pushed, 48" X 24" X 42", 5 gallon tank, wt 176 lbs.	58536 52987	Z	**5088.10**	EA	A,N,F,M

9. Sprayers, pesticide, fog/aerosol generator (ULV/ULD), skid mounted. A skid mounted unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-375-9154	Fog Generator, Skid Mounted, gasoline engine driven, Grizzly PDS, 53" lg. X 31" wi X 37" ht, wt 456 lb. empty, 18 horsepower engine, positive displacement blower w/6 psi max pressure, 5 gallon polystyrene pesticide tank.	24885	J	**13916.16**	EA	A,N,F,M
01-206-9635	Sprayer, Pesticide, Skid Mounted, Beecomist Model Pro Mist 15MP, ULV, DC driven, wt 95 lb., includes vehicle wiring installation kit (PN A4006), vinyl cover (PN AE550), and 12 volt battery.	65387	**D**	**9460.80**	EA	N,F,M
01-445-8380	AGULVE, Sprayer, Pesticide, Skid Mounted, Beecomist Model Pro Mist 15MP with an aluminum frame, ULV, DC driven, wt 95 lb., includes vehicle wiring installation kit (PN A4006), and repair parts kit (PN A0532.2)	19204& 65387	**D**	**14279.65**	EA	A,N,F,M

01-141-2557	Aerosol Generator, Pesticide Skid Mounted, Curtis Dyna Model 2740 Series II, 15 gallon tank, 48" X 41" X 35", wt 495 lbs.	82254	Z	**5102.26**	EA	A,F,M

10. Sprayer, Pesticide, Aerial Application Unit, Liquid or Dry Pesticide. Designed for use with rotary wing aircraft. Units may be electric or gasoline engine driven and internally or externally mounted. Units may be equipped with booms.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-206-9614	Dispersal Unit, Insecticide, Model PAU-9/A. Unit is currently restricted to internal mounting in a UH1H helicopter airframe.	65388	X	**18122.90**	EA	N
01-262-8707	Pesticide Dispersal Unit (PDU), Multicapacity, Part No 96800, helicopter slung, low volume liquid spray system, ULV Spray System and Solid (Granular) Dispersal System, 150 gallon tank capacity.	52905	J	**85513.24**	EA	A

11. Trap, Insect, to include light traps and insect bait boxes.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-134-9229	Trap, Insect, Portable, Battery Operated, Hausherrs Model CDC, battery operated, cylindrical, w/14.5 inch diameter aluminum cover. **S9M**	30286	L	---------	EA	A,N,F
00-607-0337	Trap, Mosquito Light, New Jersey. Used to collect mosquitoes where 110Volt-power source is available. 14" X 9.5", wt 9.5 lbs., weather-proof time clock included.	30286	D	**277.39**	EA	A,N,F,M
01-106-0091	Trap, Solid State Army Miniature (SSAM), Hock Model **1012**. Used for mosquito surveillance, portable powered by either D cell or rechargeable 6-volt gel cell batteries. Wt 3 lbs. w/o batteries. For D-cell non-rechargeable alkaline batteries, order 6135-00-835-7210 or 6135-00-930-0030. For gel-cell rechargeable batteries, order 6140-00-432-0490. For a battery charger to recharge gel-cell batteries order 6130-00-629-7396. **S9M**	6T654	L	---------	EA	A,N,F,M

12. Trap, animal. A device snap/set/glue used to capture animals.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-252-3384	Mouse Trap, Spring, Model CANTMISS OR GGG-M-550, WD base, w/4 way release, 4" X 2" X 0.5." **GSA**	98878	G	**5.33**	DZ	A,N,F,M
00-260-1398	Rat Trap, Spring, CAN'T MISS RATTRAP, 7" x 3" x 0.5." **GSA**	98878	G	**17.34**	DZ	A,N,F,M
00-260-1401	Trap, Cage, Animal, Portable, Collapsible, Part No, 206, 27" X 9"X 9", wt. 7 lbs. **GSA**	23907	L	---------	EA	A
01-095-1738	Trap, Cage, Animal, Woodstream Model 1045, galvanized steel, 36" X 11" X 11", wt 16.5 lbs.	84155	D	**63.46**	EA	F,N
01-096-1632	Trap, Insect, Sticky Trap, Roach, .box of 24 traps, 5" X 3.5" X 2,"	9L921	D	**66.93**	BX	A,N,F,M
01-240-6170	Trap, Rodent, Glue, Woodstream Model M-319 (Holdfast), 9" X 9" X 4", wt 1 lb., 24 traps per box.	84155	D	**21.39**	BX	A,N,F,M
01-371-6770	Mousetrap, Spring, Part No 81820, expanded trigger.	40850	D	**1.89**	EA	F
01-412-9363	Indoor Fly Catcher Traps, Part number 445 or M500, cylindrical sticky fly trap, 12 per box.	27633 84155	H	**50.28**	BX	A,F
01-412-9371	Insect FlyCatcher, Part Number M510, 144 sticky paper strip rolls per box.	84155	H	**191.08**	BX	A,N,M
01-420-9038	Insecticide, Glue, Part Number 101, four 1 gal containers per box. Used to rodent glue boards.	27633	D	**132.22**	BX	A,N,F,M
01-423-2471	Pole, Animal Restraint, Part No 81506,	7D560	D	**121.21**	EA	A,N,F,M
01-431-1186	Trap, Rodent, Mechanical, Aluminum, Sherman Model LFAHD, Box of 30 traps with 5 spare curved wires and 5 spare straight wires for linking sides and bases.	0TT47	Z	**625.96**	BX	A,N,F,M

13. Rodent Bait Stations. Tamper proof devices used to hold rodent bait.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-467-6951	Container, Rodent Bait, Plastic, Tamper Proof, spring loaded, self closing (Keep-Rat Bait station)	1MHL2	J	79.50	BX	A,F,M,N
01-481-1312	**Container, Rodent Bait, Plastic, Tamper Proof (Aegis Clear Mouse), 12 bait stations per box**	00A02	D	21.35	BX	A,F,N,M
01-481-1313	**Container, Rodent Bait, Plastic, Tamper Proof (Aegis Clear View-Rat), 6 bait stations per box**	00A02	D	55.50	BX	A,N,F,M
01-481-1316	**Container, Rodent Bait, Plastic, Tamper Proof (Aegis Cool Box/White-Rat), 6 bait stations per box**	**00A02**	D	**55.50**	**BX**	**A,N,F,M**
01-423-0737	Container, Rodent Bait, Plastic, Tamper Proof, capable of dispensing solid or granular bait, Part No 05830, 6 bait stations per box.	9L921	D	**63.49**	BX	A,N,F,M

14. Spreader, Granular. A manually-carried or push cart/trailer-mounted unit designed to disperse granular pesticides, fertilizers, and seeds.

NSN 3750-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-903-3734	Spreader, Loose Material, Manual, Rotating Disc, Model Cyclone 4T06-6T08, 8' maximum spread path width. 40" X 20" X 20", weight 140 lbs. **GSA**	18654	L	**22.46**	EA	A,F
00-965-0043	Spreader, Loose Material, Towed, Rotating Disc, Part No 111, 56' maximum spread path width. **FLZ**	00229	V	**685.00**	EA	F
00-729-6897	Spreader, Loose Material, Manual, Hand Crank, Rotating Disc, Part No PCB or 75, 12' maximum spread path width, 10.5" X 9", wt 5.5 lbs. **GSA**	84945 86951	J	**127.40**	EA	A,F
00-269-6028	Spreader, Loose Material, Manual, Gravity spread, Rotating Disc, Model Gandy Line Tender 901-3JRKLT, 1.75' maximum spread path width. 36" X 36" X 42", wt 124 lbs. **GSA**	89055	L	----------	EA	F

15. Pheromone Trap stored products. Includes traps, pheromones and accessories used to monitor stored product pests.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-414-8117	Insect Wing Trap Kit, P/N 3653-13, 3-trap stations, 3-liner replacements and 6 lures.	02RG7	J	**28.09**	KT	A,N,F,M
01-414-8118	Indian-Meal Moth Lures, P/N 3153-25, 25 lures per bag.	02RG7	J	**70.88**	BG	A,N,F,M
01-414-8123	Confused and Red Flour Beetle Lures, P/N 3156-25, 25 lures per bag	02RG7	J	**66.43**	BG	A,N,F,M
01-414-8124	Khapra and Warehouse Beetle Lures, P/N 3155-25, 25 lures per bag.	02RG7	J	**50.00**	BG	A,N,F,M
01-414-9391	Insect Monitoring Kit, P/N 3565-05, Flit-Trak kit for khapra and warehouse beetles, 5 traps, 5 lures and food oil attractant.	02RG7	J	**29.82**	KT	A,N,F,M
01-414-9393	Insect Monitoring Kit, P/N 3566-05, Flit-Trak kit for red and confused flour beetles, 5 traps, 5 lures and food oil attractant.	02RG7	J	**34.88**	KT	A,N,F,M
01-414-9395	Insect Monitoring Kit, P/N 3567-05, Flit-Trak kit for saw-toothed grain and merchant grain beetles, 5 traps and food oil attractant	02RG7	J	**31.17**	KT	A,N,F,M
01-414-9397	Cigarette Beetle Lures, P/N 3162-05, 25 lures per bag.	02RG7	J	**67.75**	BG	A,N,F,M
01-414-9399	Lesser Grain Borer Beetle Lures, P/N 3158-25, 25 lures per bag	02RG7	J	**69.91**	BG	A,N,F,M
01-418-5107	Insect Monitoring Kit, P/N 3302-00, 100 traps per box	02RG7	J	**314.39**	BX	A,N,F
01-418-5110	Insect Monitoring Kit, P/N 3303-25, 25 traps per box.	02RG7	J	**50.77**	BX	A,N,F
01-418-1927	Insect Monitoring Kit, P/N 121901, 100 wing trap kits per box.	9L921	H	**152.25**	BX	A,N,F,M
01-473-1038	**Indian-Meal Moth Lures, P/N IMM-100, 100 lures per pkg.**	9L921	**D**	**300.00**	**PG**	**A,N,F,M**
01-473-1042	**Indian-Meal Moth Kit, P/N SP-IMM-20, 20 lures per box and 20 traps**	9L921	**D**	**19.70**	**KT**	**A.M.N,F**

01-473-1039	Indian-Meal Moth Lures, P/N IMM-10, 10 lures per pkg.	9L921	D	33.98	PG	A,N,F,M
01-418-1929	Indian-Meal Moth Lures, P/N 122514, 100 lures per bag.	9L921	H	71.30	BG	A,N,F

16. Bird Pest Management Devices.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-076-3541	Gun, Scareaway, Zonmark II. Used to scare birds and other pests away from specific areas. Powered by propane gas (propane tank not included), 36" X 12" X 7," wt 20 lbs.	5G078	L	---------	EA	F
1095-01-437-7478	Pyrotechnic Pistol, P/N RJ1, uses w/ 15MM screamer-siren or bird banger cartridges, single shot **S9C**	0MGG7	Z	37.01	EA	F
1095-01-437-7479	Pyrotechnic Pistol, P/N B1S, uses 15MM screamer-siren or bird banger cartridges, double shot **S9C**	0MGG7	J	**49.92**	EA	F
1370-01-204-1525	Cracker Shotgun shell, 12 gauge, bird scare (shell cracker), P/N 8344212 **FG5**	07878	D	**1.35**	EA	F,N
1370-01-454-9861	Cartridge, Pyrotechnic, animal dispersal, 15MM bird screamer, P/N SCR-ICBM **FG5**	0MGG7	L	-------	EA	F
01-037-9325	Gun Scareaway, Dana Model AO-86M-3. Used to scare birds and other pests away from specific areas. Powered by propane gas (propane tank not included) , 36" X 12" X 8," wt 30 lbs.	55726	J	**326.15**	EA	F

17. Miscellaneous.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
6505-00-664-0441	Mineral Oil, Light, NF (ULV Diluent/Cleaning Agent) S9M	61757	L	----------	PT	A,F,N,M
6505-00-240-6328	Mineral Oil, Light, NF (ULV Diluent/Cleaning Agent) 5 gallon can S9M	61757	L	----------	CN	A,N,F,M
00-252-3383	Swatter, Fly, Model Plasti-Swat 51, 18"lg X 4"w X 0.5," wt 5 oz., 12 per package. **GSA**	54749	G	**3.09**	PG	A,N,F,M
01-210-2368	Aspirator, 1.5v (2 -D Cell battery) powered, &" X 3.5" X 2," wt 8 oz w/o batteries. **S9M**	30286	L	----------	EA	A,N,F,M
01-454-1982	Stake, Flag, Orange, P/N 101066, 2 ½" X 3 ½" Orange vinyl flag, 30" wire length. PG/100 EA	51985	**D**	**8.57**	PG	A,N,F,M
01-454-1984	Holder, Carrier, Stake, Flag, P/N 101124, heavy-duty green, cotton duct shoulder bag with shoulder strap.	51985	J	**13.89**	EA	A,N,F,M
01-454-1987	Scales, Spring, Pesola, 100 gram, PN# 277502, 22 cm long X 5-cm wide w/internal spring, 0.3 lb.	51985	J	**58.41**	EA	A,N,F,M
01-454-1989	Scales, Spring, Pesola, 500 gram, PN# 277506, 28 cm long X 5 cm wide w/internal spring, 0..3 lb.	51985	J	**58.41**	EA	A,N,F,M
01-474-7402	Aspirator, Oral, Entomology Specimen Collection, Model 412, Polycarbonate plastic straight tube, 12" long with plastic coupler with nylon screen inside. 2-ft rubber tube attached to end comes with polycarbonate mouthpiece.	6T654	D	9.75	EA	A,N,F,M
01-454-2256	Aspirator, Oral, Entomology Specimen Collection, with HEPA filter for respiratory protection, Model 612, Polycarbonate plastic straight 12" tube, plastic coupler w/nylon screen, screws into 0.3 micron HEPA filter. A 2 ft rubber tube is attached to other end of filter comes with polycarbonate mouthpiece.	6T654	D	40.77	EA	A,N,F,M
01-454-2344	Point Punch, Entomology Specimen, 6" long X ¾" high X 3" wide, metal punch with spring expanded handle, wt. 0.4 lbs.	59590	J	**50.53**	EA	A,N,F,M
01-454-2345	Breeder, Mosquito, 8 ¾" high X 4 7/8" diameter, consists of two clear quart sized containers, a plastic lid between two sections contains a vinyl funnel through which the emerging adult mosquitoes fly into the upper section.	59590	J	**22.66**	EA	A,N,F,M
01-454-2348	Tray, Mosquito Larval Sorter, bright white polyethylene tray, 10" wide X 13 ½" long X 1 ¼" deep.	59590	J	**15.02**	EA	A,N,F,M
01-454-	Dipper, Entomological, white plastic 5" diameter with 3' wood handle,	59590	J	**21.29**	EA	A,N,F,M

2341	P/N 1132					
01-454-2354	Vials, Collection, Entomology Specimen, 6-dram w/polyseal cap, 23-mm diameter, and 85-mm length.	59590	J	**10.09**	DZ	A,N,F,M
01-474-7377	Tweezers, Tick Removal, Stainless Steel, El Mar, Inc P/N 0621	13873	D	3.00	EA	A,N,F,M
01-456-2530	Block, Insect Pinning, 1" wide X 3" long, cut to three levels, provides correct label and specimen height on insect pins.	59590	J	**3.74**	EA	A,N.F.M
6530 01-451-5144	Light, UV, Hand Held, w/replacement bulb (NSN 6210-01-449-3170). 2" X 4" X 8" plastic lamp w/ wrist strap, operates with 4AA batteries, wt. 1.5 lbs. **S9M**	0USV5	L	----------	EA	A,N,F,M

18. Sets and Kits.

NSN 3740-	**Item (Alternate Trade Name)**	**Cage Code**	**AAC***	**Price**	**U/I**	**Users+**
00-952-2180	Trap, Rodent. Model 9-552-180, 18" X 15" X 15", wt 40 lbs. **S9M**		D	**820.48**	SE	A,N,F,M
00-148-7639	Insect Control Set, Part No. MC06250.7. C/O dusters, insecticides, protective clothing and related equipment identified in Marine Corps Stock List Sl-3-07705A.	80372	J	**3388.35**	SE	M
6545-00-952-2175	Rodent Survey Kit, Used to survey for rodents. 30" X 25" X 20", wt 170 lbs. **S9M**		X	**3076.80**	SE	A,N,F,M
6545-00-952-2178	Rodent Survey Kit #1. Used to survey for rodents. 30" X 18" X 16", wt 118 lbs. **S9M**		D	**2548.45**	SE	A,N,F,M
6545-00-982-4121	Entomological Collecting Kit, Field, 30" X 24" X 15", wt 90 lbs. **S9M**		D	**6848.37**	EA	A,N,F

19. Personal Protection Materiel.

NSN	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
7210-00-266-9736	Insect Net Protector, Field Type, MIL –I-10901, 200" X 68", wt 1lb. Used to protect personnel from insects while sleeping. Mildew resistant nylon fabric. **S9T**	81349	D	**26.20**	EA	A,N,F,M
7210-00-267-5641	Pole, Folding Cot, Insect Net Protector. Four 30" X 1" wood poles, wt 1 lb., used to suspend Insect Net protector, Field Type (listed above) from military cots. MIL-P-17662. **S9T**	81349	D	**4.05**	SE	A,N,F,M
7210-00-300-6950	Clamp, Insect Net Protector Rod. Used to Attach Insect Bar, Rod s (listed below) to military cots. CID A-A-55099. Requires to clamps to attach Rods and erect the Insect Net Protector. **S9T**	58536	D	**2.70**	EA	A,N,F
7210-00-359-4850	Rod, Insect Net Protector. Two T-shaped metal rods, used to suspend the Insect Bar, Field Type. Rods may be pushed into the ground. Rods do not fit into military cots, use Insect Bar, Clamp (listed above). CID A-A-55099. Two Rods, Insect Net Protector are required to erect an Insect Net Protector. **S9T**	58536	D	**6.50**	EA	A,N,F
7210-00-266-9740	Insect Net Protector, MIL-I-82265, 27"X77.5," Used to protect personnel from insects while sleeping, for use with military cots. **S9T**	81349	D	**27.20**	EA	N
8415-00-935-3130	Insect Bar, Head Net. Used to protect head and neck from mosquitoes. 30" X 20," wt 1 lb. MIL-I-11489. **S9T**	81349	D	**5.15**	EA	A,N,F,M
8415-00-935-2914	Insect Net, Hat. CID A-A-55082. Nylon Netting, AG323, Elastic Headwear Attachment. **S9T**	58536	D	**0.35**	EA	A,N,F
8415-01-192-2357	Insect Net, Mittens. MIL-S-37205. Head and hand covering; nylon; black; packaged in heat-sealed, waterproof bag. A component of Survival Kit, Individual, NSN 6545-00-139-3671, but may be ordered separately. **S9T**	81349	L	**5.80**	EA	A,N,F
8415-01-035-0846	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Small. Wt 1 lb., MIL-J-87024. **S9T**	81349	D	**16.60**	EA	N,F,M
8415-01-035-0847	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Medium, Wt 1 lb. **S9T**	81349	D	**16.60**	EA	N,F,M
8415-01-035-0848	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Large, Wt. 1 lb. **S9T**	81349	D	**16.60**	EA	N,F,M

20. Devices for Electrocution of Flying Insects, Reference Armed Forces Pest Management Board Technical Information Memorandum (TIM) No. 25, August 1988, for information on appropriate uses. See paragraph F.3, below to obtain either electronic or hard copies of TIM 25.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-286-2361	Wall Mount, 80W, Type I and Class A, PN # CID	58536	D	**239.57**	EA	A,N,F,M
01-286-2362	Wall Mount, 40W, Type I and Class B	58536	D	**185.22**	EA	A,N,F,M
01-286-2363	Ceiling Mount, 80W, Type II and Class A	58536	J	**268.40**	EA	A,N,F,M
01-286-2364	Corner Mount, 80W, Type III and Class A	58536	J	**242.53**	EA	A,N,F,M
01-287-1036	Ceiling Mount, 40W, Type II and Class B	58536	J	**369.83**	EA	A,N,F,M

D. Emergency Procurement of Pesticides and Pest Management Equipment.

*ACQUISITION ADVICE CODES (ACC)

Code D. DoD INTEGRATED MATERIAL MANAGER (IMM) STOCKED, AND ISSUED. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by the Integrated Material Manager/Military Service supply policy.

1. The item is centrally managed, stocked, and issued.
2. Requisitions will be submitted in accordance with Military Service requisitioning procedures.

Code H. CENTRAL CONTRACT - NOT STOCKED ITEM. Direct delivery under central contract # (non-stocked items) issue, transfer, or shipment is not subject to specialized controls other than those imposed by IMM/Service/Agency supply policy.

1. The item is centrally managed and procured.
2. Normal issue is by direct shipment from the vendor to the user at the order of the ICP or IMM. However, orders for quantities less than the vendor's minimum order of quantity may be issued from stock by ICP or IMM supply distribution facilities.
3. Requisitions and fund citations will be submitted in accordance with IMM/Service/Agency requisitioning procedures.
4. Generally, delivery will be made within applicable Service/Agency guidelines addressing customer required delivery time frame.

Code J. NOT STOCKED, CONTROLLED PROCURED. Identifies IMM/Military Service centrally managed but not stocked items. Long lead times must be anticipated, since procurement will be initiated only after receipt of a requisition. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

Code L. LOCAL PURCHASE. IMM/Military Service managed items authorized for local purchase, as a normal means of support, by the Military Service, or base, post, camp, or station level. Items not stocked in wholesale distribution system of IMM/Military Service ICP. The local purchase forms authorized by the individual IMM/Military Service must be used. NOTE: GSA FSS items are included.

E. Emergency Requisition Procedures.

1. Deploying and/or deployed forces often need pesticides and pest management equipment on
short notice. The Defense Logistics Agency has established Emergency Supply Operations Centers (ESOCs) to help meet these needs.

2. For emergency procurement of pesticides, including repellents and pest management equipment, including pesticide application equipment: Contact the Defense Supply Center Richmond (DSCR) Emergency Supply Operations Center (ESOC) at DSN 695-4865 [commercial (804) 279-4865]. This ESOC is staffed 24 hours, 7 days per week.

3. For technical logistical inquiries, contact the DSCR Chemist at DSN 695-3995 or commercial at (804) 279-3995 during normal duty hours (0730-1700 hrs eastern standard time) or via pager number 1-888-824-4030, which is available 24 hours, 7 days per week.

4. For personal protection equipment (respirators, bed nets, head nets, etc.): Contact the Defense Supply Center Philadelphia ESOC Customer Assistance Branch at DSN 444-3042/3043 or Commercial at (215) 737-3041. The Philadelphia ESOC is staffed 0630-1700 hours Monday through Friday, eastern standard time.

F. Armed Forces Pest Management Board (AFPMB) Technical Information Memorandum (TIM) 24, "Contingency Pest Management Pocket Guide".

1. This TIM is intended for field use during exercises and contingency operations by deployed forces. The purpose of TIM 24 is to provide basic information on using pesticides and pest management equipment to control disease vectors and pests during field situations worldwide.

2. Most of the pesticide dispersal equipment listed in paragraph C., above, should only be used by personnel
(i.e. preventive medicine or installation pest control personnel) who have been formally trained and certified in accordance with DoD 4150.7-P, "The DoD Plan for the Certification of Pesticide Applicators, September 30, 1996 or DoD 4150.7-M, "DoD Pest Management Training and Certification, April 24, 1997. All other personnel should not procure or use pesticide dispersal equipment unless specifically authorized by Service instructions, regulations, or directives.

3. You may obtain copies of TIM 24 from the AFPMB Home Page:
http://www.afpmb.org

G. AFPMB TIM 19, Catalog of DoD Pest Management Materiel, Other than Pesticides.

1. This TIM is intended to graphically portray through electronic images, the equipment items named in this listing. Whereas this listing is updated at least three times per year, the catalog will be updated at most two times per year, so that there may be some lag between the two sources. The TIM also provides further technical details for the items on this list, and thus is designed to complement the list.

2. 2. TIM 19 is available from the AFPMB Home Page, other AFPMB publications are available from that site or by writing to: The AFPMB, ATTN: DPMIAC, Forest Glen Section, WRAMC, Washington, DC 20307-5001, or calling DSN 295-7479 or commercial (301) 295-7479. You may electronically access AFPMB publications via the AFPMB Home Page: http://www.afpmb.org

H. List Maintenance.

The Armed Forces Pest Management Board and Defense Supply Center Richmond in order to provide current information to the DoD Pest Management Community jointly publish this list. Comments and questions are welcome. Please send them to: Armed Forces Pest Management Board, Equipment Committee, ATTN: Ex Officio, Forest Glen Section, WRAMC, Washington, DC 20307-5001, or phone Commercial (301) 295-7476, or DSN 295-7476, or FAX Commercial (301) 295-7476 or to Clifford Myers at DSCR (804) 279-3995 or FAX (804) 279-3653, DSN 695. Pager is 1-888-824-4030.

US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
ATTN: MCHB-TC-OEN
ABERDEEN PROVING GROUND, MD 21010-5403

DSN 584-3773
Commercial (410) 436-3773
FAX (410) 436-2037

INFORMATION REQUEST FORM

Please mark the items you wish to receive and fill out the information at the end of the form. Then, mail or FAX this page to us and we will promptly send you the information.

Request notification by E-mail of Bulletin availability. My E-mail address is:

AEHA/CHPPM TECHNICAL GUIDES AVAILABLE

USACHPPM Technical Guide No. 103, *Prevention and Control of Plague*, September 1995

USAEHA Technical Guide No. 116, *Guide for Fish Kill Investigations*

USAEHA Technical Guide No. 119, Collecting & Shipping Insects for Resistance Testing

USAEHA Technical Guide No. 138, *Guide to Commensal Rodent Control*, December 1991

USAEHA Technical Guide No. 142, *Managing Health Hazards Associated With Bird and Bat Excrement*, December 1992

USAEHA TG No. 189. *Procedures for the Diagnostic Dose Resistance Test Kits for Mosquitoes, Body Lice, and Beetle Pests of Stored Products*, August, 1992.

USAEHA Technical Guide No. 196, *Guide to Poisonous and Toxic Plants*, July 1994

USACHPPM Technical Guide No. 208, *Procedures for Thermal Control of Cockroaches in Army Food Service Facilities*, January 1997

PEST MANAGEMENT FACT SHEETS

Just the Facts, *...On Spiders*
Just the Facts, *Cockroach Control*
Just the Facts, *Ticks and Tick-borne Diseases*
Just the Facts, *Human Ehrlichiosis*
Just the Facts, *...About Head Lice*
Just the Facts, *Interim Recommendations for Reducing Risk of Hantavirus Infection*
Just the Facts, *How to Protect Your Home, Pet and Family from Hantavirus Infection*
Just the Facts, *Pesticides and Child Safety*
Just the Facts, *Why Mosquitoes Cannot Transmit AIDS*
Just the Facts, *West Nile Encephalitis*
Just the Facts, *Dengue*
Just the Facts, *Mosquito Control around the Home*

OTHER DOCUMENTS

Getting Rid of Roaches, USACHPPM, June 1993

PLEASE COMPLETE THE FOLLOWING

NAME:
_____

ADDRESS: _____
_____
_____
_____

PHONE: DSN _____
COMMERCIAL_____
FAX NO: (Commercial Please) _____

E-MAIL ADDRESS:_____